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Recent Work of the Grange.

Those outside the order naturally ask: What has the Grange done, what is it doing and what does it propose to do?

The primary purposes of the order are, always have been and we trust will continue to be, to promote the interests of agriculture and develop a higher type of manhood and womanhood among ourselves, and whatever makes to these ends should be the work of the Grange.

Organization and co-operation is essential to any form of life. A plant or an animal is simply organized matter, and the higher the life the more complete the organization. Every form of industry is becoming organized, and the Grange is the organized interests of agriculture, and consequently the organized interests of the rural home, for these interests are inseparable. It has benefited the farmer not alone through organized efforts to buy and sell, but in educating him so that he can buy and sell without this organization.

It is saving the farmers of this State nearly \$30,000 per year on their insurance. It has been instrumental in passing legislation in this State which compels the corporate interests of the State to bear a larger burden of taxation, and relieving the property-holder to that extent. But the greatest work it has done is to bring people having the common interest of agriculture together where they can discuss ways and means for further advancing their interests.

With increased fame comes increased responsibility. With nearly forty thousand members in this State, one ought to feel responsible for some of the conditions that are allowed to exist. It seems to me that we should insist on the honest enforcement of all our laws, and that party or that candidate for office who does not pledge himself to this should be turned down. I believe the farm and home are paying nearly double the taxes they should, if property were taxed according to its value.

I believe that the Massachusetts corporation tax law, if passed in this State, would relieve the farmer here as it has in Massachusetts and Michigan.

W. J. THOMPSON.

Lecturer Maine State Grange, Androscoggin County, Me.

Poor Cottonseed Meal.

Since July 28 thirteen samples of Star Brand cottonseed meal put out by Sledge & Wells, Memphis, Tenn., have been sent to the station for analysis. Eleven of these samples were sent by the importers and were taken from as many cars. Because of the poor appearance of the goods samples were sent to the station and the company has refused to handle the meal. The other two samples were from the same locality.

None of these goods had the appearance of prime cottonseed meal. Most of them were of poor color and full of hulls. Two of the samples carried a good deal of cotton and appeared "wooly." Two of the samples carried forty-five per cent. protein, one carried forty-three and the others carried from thirty-five to forty per cent. protein. None of them had the sweet nutty flavor characteristic of good cottonseed meal; some of the samples were tasteless, others had a bad taste, in two cases being bitter as if burned. While all or nearly all of these goods have been or will be shipped out of the State, and no low-grade goods of other brands have been reported, users of cottonseed meal should be on the lookout for poor meal.

CHARLES D. WOODS, Director.
Orono, Me., Aug. 12.

To Increase Dairy Profits.

In order to make a success here in Maine it is only necessary to increase the size of the herds. That is the secret of the whole matter. I know of one creamery in Vermont that has only eleven patrons; but as these men have an average of one hundred cows each the result is a complete success. This idea must be carried out here and our farmers increase the size of their herds.

Not only that, but they must look more sharply after the individual merit of their cows. No matter how good the breed, this individual merit must not be neglected. A cow may belong to one of the best dairy breeds and have a pedigree as long as the moral law, and yet be absolutely worthless. That was the case of Medora Fern, in the Pan-American test. This cow was a thoroughbred Guernsey, but as an individual she was good for nothing and only served to hold the others back during the six months test. Had there been one more cow like her in the herd the Guernseys would have lost. No matter what the breed may be, the farmer must see to it that no poor individual creeps into the herd, and

where one gets in by accident it should be eliminated as soon as possible.

When these matters are all attended to, and the rules of business carefully observed, dairying is bound to become one of the most profitable branches of agriculture in this State. I know one man in Vermont who bought a farm and stocked it by running in debt, yet he has within three years paid off the last dollar and has a good margin left. That sounds like the Aroostook, but it is a fact.

I believe there is just as much money in the business here as in Vermont if it is properly conducted, but we are far behind them now in this matter of profit. How this matter can be remedied is the question for us to now consider.

Every State and every section is apt to have its own specialty in which it excels. This is the case with every other kind of business that I know anything about, and

in topdressing meadows for grass, a few things are essential. The land should be put in good physical condition; that is, it should be smooth, well seeded and fertilized.

It is necessary that there should be a good sward, to begin with, and then it will not be difficult keeping it in a productive condition by further timely applications of manure. And this should be done before the grass has begun to fall in yield; if not, it will be difficult bringing it up to a productive point again. A small application every year or two is better than a large one calculated to last several years.

After grass has become run out there is little use in undertaking to bring it up again. It then needs to be plowed, devoted to other crop, and reseeded to grass again.

Anytime after haying up to winter, but usually the earlier the better. It should be sufficiently early to allow the fall rains to

lay well up in quantity and quality, for it is our most important crop.
Franklin County, Vt. E. R. TOWLE.

Modern Farming in Pennsylvania.

On a hillside overlooking the beautiful Lackawanna valley in Wayne County, Pa., near the manufacturing town of Honesdale, is located the ideal farm home of George L. Erk.

The tract contains about one hundred acres, mostly hill land, with soil varying from red shale to loam, all strong and fertile, and especially adapted to grass and pasture. Twenty-five acres are in meadow, nearly an equal amount in cultivated crops, orchard and garden, the remainder in pasture. The meadows at the time of my visit were in fine condition, considering the season, and will yield an average crop. One two-acre field in meadow has not been broken in twenty years, yet the yield this

and convenience. Like all of Mr. Erk's buildings and farm improvements, practical utility and convenience are the prevailing ideas in construction. The stables are in the basement. They are thoroughly ventilated. Numerous windows furnish an abundance of light. The walls are heavy and tight. A temperature of 45° to 50° is maintained during the coldest winter months. Chain swing stanchions are in use, sawdust is used for bedding, and the dropping troughs are kept scrupulously clean, being flushed and washed with water every day. Drinking basins stand between every two cows, and are kept always full of fresh, pure water by an automatic, self-feeding arrangement. Water is piped into the barn and house by a hydraulic ram.

This up-to-date farmer has an acetylene gas plant which furnishes light in every room of his house equal to that of the best lighted city home. The house is a large,

and as much technical education will be taught to him in the classroom as is possible in two years.

The college is well prepared to carry out these courses. Its shops and laboratories are very completely furnished with tools and apparatus, its teachers are capable, and the expenses for the student are somewhat lower than in many other places.

These courses ought to be popular in Rhode Island, a State in which its artisans are given the highest reputation for skill and efficiency. In order to maintain this reputation in the future, it will be necessary to give our young machinists and engineers a better education, in both general and mechanical subjects, than the same class of men have now.

Crops in the Kennebec Region.

The hay crop, despite all the early prophecies of failure, is fully up to the average, but we have had the worst time to harvest it that your correspondent has ever seen. Of the corn crop we cannot speak so hopefully. It is late and not well grown generally. Sweet corn will be a comparative failure unless we have an unusual September.

Apples are about an average, but are dropping badly. Grain is good, but some pieces are choked with mustard. I wish some one would tell us how to get rid of it. I think I would plow as soon as the land was dry and harrow often and not sow the grain till late in June. It seems as if the weed might get started so that the process would kill most of it. I saw a piece of barley the other day that will have more mustard seed than barley. All fields are infested more or less.

Potatoes are of good quality and have very fine green tops. Bugs are not plenty. I have heard complaint of rot, but the complaint does not seem to be general. The less said about gardens the better.

Kennebec County, Me. D. H. THING.

Among the Farmers.

There is a large field to be opened up in agricultural and horticultural education for women.—G. H. ELLIS, Middlesex County, Mass.

I have been impressed with the enormous waste in lumbering as carried on in some sections. They often take only the butt log, leaving to waste much of what we should, in this section, consider valuable timber. A system of Government forestry is needed.—A. C. STODARD, Franklin County, Mass.

Where trees are so low there is no occasion to cultivate, as no grass will grow. There is an orchard in my neighborhood that has not been plowed in forty or fifty years. It has been the practice of the owner to apply a cartload of manure to each tree every three or four years. The orchard is one of the best in the vicinity.—SAMUEL C. MOON, Morrisville, Pa.

The Grange insurance organization now carries more than four thousand policies, and saves the farmers more than half the cost of insurance. The Grange rate is three-fourths per cent. for a three-year policy, against 34 per cent. in the regular companies.—H. O. HADLEY, Rockingham County, N. H.

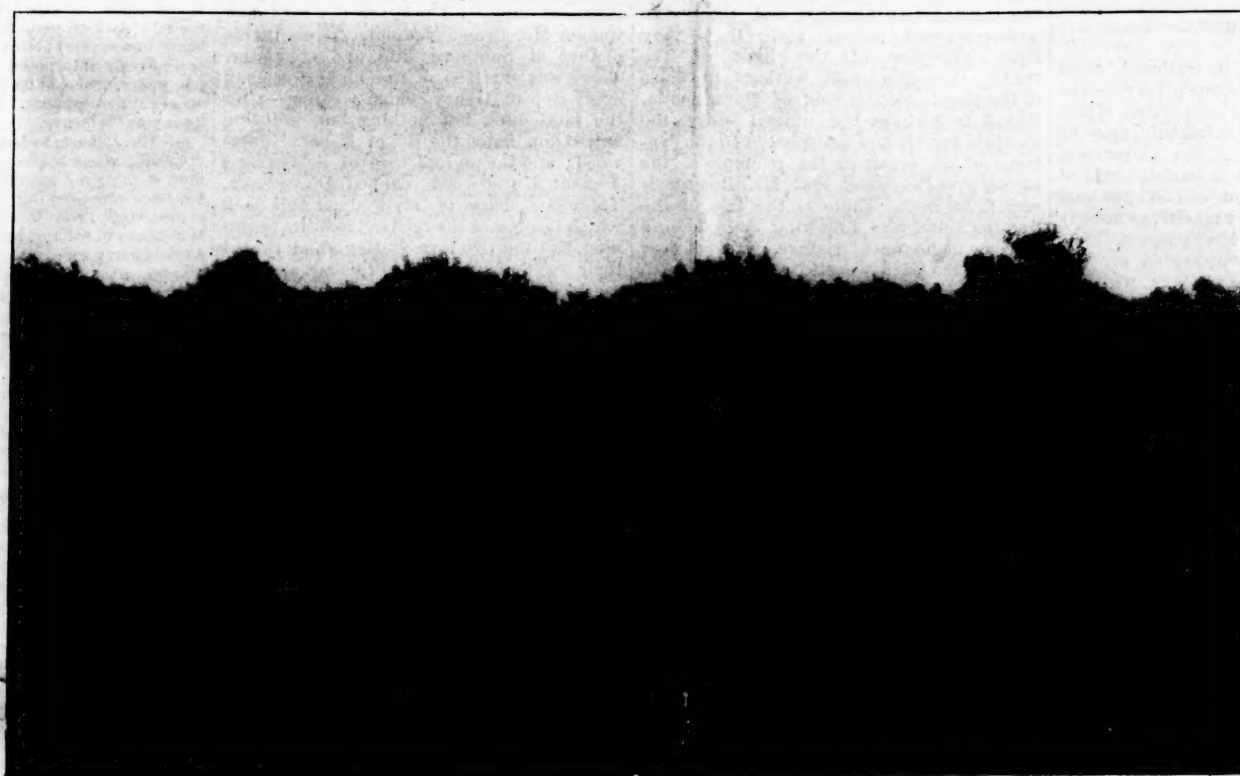
We have found that we can apply machinery in Massachusetts as well as elsewhere. The rugged hills of old New England were never plowed as they are now. We find from our records that there are no abandoned farms in Massachusetts. Some farmhouses may be vacant, but the land is used for farming purposes. The extension of electric railways is doing much to make farm life more attractive.—CARLTON D. RICHARDSON, Worcester County, Mass.

Better prices for milk are necessary to material improvements in the supply. But there are dealers who are willing to pay a higher price for better milk. The best class of dealers tell me that they have more trouble in finding dairymen who will furnish a satisfactory bonus above the market price. I know of a dealer in Philadelphia who is anxious to pay five and a half cents a quart for milk that will come up to his standard of cleanliness, which is by no means unreasonably high, and he can't find a sufficient supply.—DR. L. PEARSON, Alleghany County, Pa.

Nuts Used as Food.

Nuts are used extensively as a luxury and their food value has been given little attention. According to the report of the Department of Agriculture nuts were imported to the value of \$1,518,484 in 1901, and this amount does not include the nuts which are admitted duty free. The use of nuts under the unfavorable conditions for digestion has given to them a reputation of being indigestible. If used under favorable conditions as part of the meal and not as an addition to a product which is indigestible itself, there is no reason why many of the nuts should not be regarded more favorably as food. The cost of nuts places them among the luxuries, since they cannot be regarded as an economical food material, except possibly the peanut. Compared with the more expensive forms of breakfast foods many of the nuts are not expensive forms of food.

The analyses of the nuts which have been made in connection with this study include the native nuts and those found on the market. There are other nuts besides those that have been selected which it is hoped will be added to the results given in this paper at some future time. As a matter of interest the chufa nut has been included in the analyses. While the chufa nut is not found in the market yet, it is advertised by seedsmen as a nut which readily grows in Iowa and can be successfully raised in New England and the Middle States. The peanut is undoubtedly a valuable food material, and its reasonable price readily places it as the most useful of the nuts commonly met with in the market. J. P. WREMS.



A SUCCESSFUL PENNSYLVANIA CHESTNUT ORCHARD.

certainly the dairy business is no exception to the universal law of trade. Maine has developed an aptitude for the cream trade and so rapidly has she forged ahead in this industry that she now holds the Boston market. It is to this State that the people of Massachusetts now look for their supply of fresh cream, and this is the trade to which we should cater. They come here because the cream is here, and it is of the best. On the same principle they go to Vermont for their butter because it is the best. That is their specialty, and in this line they are most decidedly ahead of us. The butter that is now being made in Maine is largely from the poorest cream, while all the sweet cream goes to the Boston market. Now, you must see that while this fact is giving our cream a splendid reputation it is giving our butter a black eye in the big markets. That is why I believe that cream should be our future specialty.

At the present time we are not supplying the Boston market with what sweet cream it calls for. So rapidly has this trade grown that our creameries have not been able to keep pace with it. There is certainly but little need of both cream and butter when there is more profit in the cream trade. Unless we supply this market and this demand, we are quite likely to lose it. If Boston begins to turn to other States to supply this deficiency, it is more than likely that these other States will begin to cater to it. That is exactly what we do not want to see happen. While I would not discourage the making of good butter, I would most certainly discourage the making of a poor or even inferior quality of butter to still further damage our reputation in that line. Cream should be our specialty. S. C. THOMPSON.

Winterport, Me.

Fall Topdressing.

As soon as haying and harvesting are over is a good time to commence to plan and work for another year's crop. There is always something to be done on the farm, and there are many things that if well and seasonably performed, will add much to the productivity and value of the farm. On most farms there are either fields or portions that from various causes are hard to plow and devote to cultivated crops, but which when put in proper condition make excellent grass land. It is of course desirable, as far as it can be done, to plow enough to make the surface smooth so that haying machinery can be used to advantage.

There should also be a firm, well-seeded sward. After this is once accomplished no attempt should be made to plow the land again so long as paying crops of hay can be obtained by judicious topdressing and suitable care.

We have a small piece of this kind in the corner of a field that is stony and hard to plow, and too moist for successful cultivation. Having succeeded in getting it into good condition for mowing, it produces excellent crops of hay, with occasional topdressings of manure. This requires little work and is much better than to try and devote to other crops oftener than is actually necessary.

render the manure soluble and force it down among the roots of the grass, where they will more readily get the benefit of the fertilizer, and where it will also act as a mulch or covering during our severe winters. This is something that is essential. Our meadows are too frequently injured by being bare during cold weather.

Some care is necessary in doing a good job of this kind. Coarse, strawy manure is not the best for this purpose, as it should be such as can be spread evenly and made fine in some manner.

A careful man will do this well by hand, but if there is much of this work to be done a manure spreader would excel any hand work in the uniformity and evenness produced, besides making the manure go further.

After it is spread—if done by hand—it will be an excellent plan to go over the ground with a good bush weighted sufficiently to fine the manure where lumpy and press it down among the grass roots.

I remember once of seeing a man doing this kind of work riding comfortably on the bush. As he was a heavy man there was not much to be seen of the manure after he got through.

There is no better way to dispose of manure where the farmer has it for the purpose than in topdressing such fields or pieces of ground that are too moist to plow, and yet with proper care will produce good crops of hay.

Farmers who practice what is termed a short rotation of crops, that is, keep their fields in grass not more than three or four years before plowing again, will usually require all of the manure for the tillage crop, and where reseeded so often there should not be much tendency toward "running out" of the grass crop.

A practice is quite common among farmers—once more so than now I think—of pasturing cows over night in a field in autumn, and in this way fertilize sufficiently either for grass or to plow and devote to other crops. Sometimes a piece difficult to plow has been treated in this way with good effect.

If a field is too rough and forbidding it would be better to burn to pasture at once, and bestow enough more work and fertilizer on the remaining portion of the meadows to fully compensate for the diminished area.

Where the land was not sufficiently fertilized last spring on seeding to grass, or for any reason the stand is not what it should be, a moderate application of manure will usually be of much benefit. It will help to establish a better sward and to carry it successfully through the winter.

Where there is not sufficient manure for the purpose I would not hesitate to apply some kind of grass fertilizer—indeed I think where it is advisable to keep a field in grass for a considerable number of years, it would be better to apply manure one year and a fertilizer the next, both of course in moderate quantity when applied every year. I have had good success with a standard superphosphate alone for a term of years. This was applied early in spring.

In all possible ways farmers should endeavor to keep the production of grass for

season is fair and the hay of excellent quality. "If we don't get one and a half tons of hay per acre," said Mr. Erk, "we break up the meadow. Our meadows are given a topdressing of barnyard manure every two or three years."

"Of the plowed land ten acres are in corn, Leaning, Pride of the North and Stowell's Evergreen. The latter came up thinly and will be a light crop. The field corn is making a rapid growth and will yield heavily. This corn is grown for the silo. Our silo has been in use thirteen years; has a capacity of ninety tons, which is too small for the farm, and we are preparing to enlarge it."

"Do you think the silo an improvement on the old system of preserving fodder?"

"I consider it a necessity on every stock and dairy farm; we could not get along without it."

"A few acres of oats are raised to seed out, and potatoes, garden truck, root crops, apples, pears, plums and other fruits for home use. The leading and most successful varieties of apples for this section are Baldwin, Greenings and Spys. This season's crop of apples will be light, not over one-third of an average, while many orchards throughout the country are loaded with a heavier crop than last year."

Mr. Erk's dairy is his pride. Twenty-five handsome, full-blooded Jersey cows and twenty-five head of young stock are kept on the farm. Twenty-three of the cows are registered and all the young stock is eligible to registry. One of the cows, Goldenrod 4th, No. 11234, has produced as high as forty-five pounds of milk a day. Another cow, six months after calving, produced two pounds of butter a day for three successive weeks. Nearly all of the cows are dehorned. Mr. Erk being a firm believer in dishorning. He also considers the Jersey the best breed for butter on the Pennsylvania highlands.

The butter is all made on the farm, packed in neat pound prints, wrapped in parchment and sold to regular customers in the local market. The price received is twenty-five cents a pound during eight months from April to November, and thirty cents during the four winter months.

"We are making 175 to 190 pounds of butter a week," said Mr. Erk. "We could sell four times that quantity at home if we had the facilities for making it. In fact, all our market products, butter, young stock and hogs, are sold direct to the consumer."

"We use a large, hand-size De Laval cream separator. The cream is churned by horse power in a common revolving barrel churn and the butter worked in a hand butter-worker. We expect soon to put in a combined churn and butter-worker, believing it will be a saver of labor and time."

"We never sell hay; it is selling your farm at piecemeal. When we bought the farm about thirteen years ago, we said we should never sell hay unless to accommodate a neighbor, and we never have. We run an all-the-year-around dairy, feed bran in large quantities, gluten, oil meal and cottonseed meal."

The barn is a model of neatness, utility

modern, roomy structure, finished inside in pressed hard woods, handsomely furnished, with eighty feet of veranda and every practical convenience that ingenuity can invent or money purchase. Mr. and Mrs. Erk and a family of bright healthy boys and girls do most of the work on the farm, occasionally a man being hired for extra work. Mr. Erk has solved the problem of real success on a Pennsylvania hillside farm.

Excessive freight rates to city markets, incompetent hired help, unreliable commission merchants, losses in shipment and other similar disadvantages do not worry. It is planned to carry on successfully only such farming operations as the owner and his family could do themselves and has succeeded. He has built up an ideal home, which he regards of greater value than a large bank account or the addition of many acres to his farm. His family enjoy the improvements and conveniences of the best city home combined with all the attractions of country life. Professional theorists and commercial farmers may advocate other methods of farming; it matters little to him. Methods which lead to success, to prosperity and contentment are true methods.

ELMER E. REYNOLDS.

Wayne County, Pa.

Practical Studies at Kingston, R. I., College.

Among the new courses in agriculture to be offered at the college this year is a two years course, beginning where the grammar school or the district school leaves off and giving a large amount of agricultural instruction, combined with some of the studies which would be secured in high school. It is called the Agricultural High School Course. The course is designed to meet the needs of those who feel that they cannot afford the time and expense of a high school and college course. The instruction aims to be practical and such as will be of immediate help in the every-day work of the farmer. Laboratory practice will go hand in hand with the classroom instruction.

Candidates for admission must be not less than sixteen years of age and must pass the same examinations as those demanded for entrance to the first year of the preparatory school.

The general subjects taught will include English, business arithmetic and farm bookkeeping, algebra, geometry and general history. The agricultural subjects will include "Soil Management and Plant Life," "Farm Crops," "Animal Industry," "Vegetable Growing," "Fruit Growing," "Dairying," "Poultry Culture," "Farm Mechanics," "Carpentry and Forging," and a brief study of the farmer's social problems.

At the opening of the college next month, there will also be opportunities, not provided before, for young men to get the necessary training to become efficient carpenters, machinists, steam engineers or draughtsmen.

The plan provides for two years of study in one of the branches named. The student will spend much time in the shops, practicing the actual trade that he has selected,

Vegetables in Light Supply.

The usual late summer dullness prevails in the city markets. The consumption is further reduced by the high prices asked for many lines of vegetables. The supply is light for the season.

Some of the farmers who team fruit and produce to Boston come from twenty-five miles or more out in the country. Although their nearby markets are often good ones, they find that large loads cannot be readily sold at fair prices unless taken to Boston or other large cities. Some of them start early in the morning and take their stand in the market district early in the afternoon. This is the time when most of the nearby gardeners have sold out and gone home, and these distant farmers largely occupy the field. Of course, the demand is not so good as in the morning, but the loads are often sold out by night. If not, the farmer retains his stand all night, selling the rest of his load in the morning. "We earn our money," said farmer Fredrick of Hopkinton, who had brought in a load of apples, Wednesday. "To sell a load sometimes takes the best part of two days. This load is mostly Williams apples and Clapp's Favorite pears. They both bring about \$1 or \$1.25 per bushel. Vegetables are all bringing good prices. I shall have a lot of tomatoes soon. If I had them now, they would bring \$2.50 per bushel. Some of the Watertown gardeners have them. The Belmont is one of the best early kinds, being large and smoother than the others. Boston Market and most other varieties."

It looks now as if tomatoes would be scarce, as the vines are said to run to leaves and to be late in ripening the fruit. Cabbages are scarce and high. Some dealers report quite a sale for the half-turnip, half-cabbage vegetable called kohlrabi. Good ones bring about 90 cents per dozen, the white variety being usually preferred to the purple. They are out when half grown and still tender.

Hay Price Unsettled.

The leading hay markets of the country remain in the weak fluctuating condition noted last week. But receipts are rather light, which fact would indicate that prices may have dropped as far as they will get for the immediate present. The best grades are selling well at full quotations. Possibly some improvement may occur before the week becomes fully seasoned. Trade is rather light, most buyers taking only small lots to last until the new crop is ready in large quantities. In Northern markets the bulk of the offerings are still of the last year's crop, while in the South new hay is plenty and selling at about the price of the old. But elsewhere old hay of similar grade is given preference, and brings \$2 or \$3 more per ton.

At New York hay receipts were 6776 tons or about ten per cent. less than for the preceding week, but still quite large compared with 4679 tons for the corresponding week last year. Trade is slow. Straw is in light receipt. The Buffalo market is reported overstocked with old hay and low-grade new hay. The Montreal market is reported weak and much of the hay arriving damaged by the incessant rains which have lately prevailed in Canadian hay sections. By no means all of the Canadian crop has been harvested, and appearances indicate that a large proportion of Canadian shipment to New York and New England will be in poor condition as a result of the weather.

Following are the highest prices for hay, as quoted by the Hay Trade Journal, in the markets mentioned: Boston \$21, New York \$22, Jersey City \$22, Philadelphia \$19, Brooklyn \$18, Buffalo \$18, Pittsburgh \$18.35, Duluth \$18, Minneapolis \$10.50, Baltimore \$10, Chicago \$13.50, Richmond \$15, Cincinnati \$17.50, Nashville \$13.50, Kansas City \$9, Washington \$15.75, Memphis \$13, St. Louis \$13, New Orleans \$16.50, Montreal \$11.

Wheat Still Advancing.

The continued advance in wheat seems to be owing to the small stock available at the market centers. Farmers receiving become more prosperous are not obliged as formerly to rush their crop into market as soon as harvested, and this year many of them have been holding back for better prices. The cry of "dollar wheat" has attracted many followers with temporary result, at least, of reducing shipments at ordinary prices. Whether the market will be flooded later in the year remains to be seen. The crop is certainly a big one even if not fully up to early Government estimates. The export demand is at present active and would take larger supplies if they could be had. European buyers suspect that prices may be higher before they are lower and are trying to replenish their supplies.

Flour has advanced ten to fifteen cents per barrel in sympathy with wheat, while bran and other mill feedstuffs a rising tendency. Corn has to a slight degree followed the advance of wheat, and bag meal has risen one or two cents during the week. The growing crop is unquestionably backward everywhere, and only a long spell of warmer weather will secure the fulfillment of early estimates. There would seem to be fully as much ground for a sharp advance in corn as in wheat, but corn may still be had at moderate prices. The crop will almost certainly be more or less short, and apparently much of it will be last year's soft and poor.

Is Cold Storage being Overdone?

While cold-storage plants are a necessity for the preservation of most varieties of apples, so that the dealers and consumers may have fruit in as near natural state as possible, throughout the season, yet some dealers believe the business is overdone and has been the past three seasons. Such is the view taken by L. K. Sutton, a Columbus (O.) expert, at the Niagara fruit buyers' convention. He said:

"Growing apples is a business of itself; buying, storing and selling apples is another, distinctly so. It is the duty or privilege of a grower to produce as fine fruit as possible, of the varieties best adapted to his location, and then sell to a reliable dealer and let him take the risk of storing and chances for profit. To buy right a dealer should secure his fruit at such prices that he can sell at any time and take the risk of storing for an advance later in the season, but how few have done this the past two seasons."

"Buyers paid more for apples during August and September than they were able to sell for at any time during the entire season. The reasons are various. When questioned and asked, 'Didn't you pay a little high for that orchard?' they would reply, 'Oh, no; we will put in storage and get our price after a while.'"

"Men seem to forget that it costs to store apples, that there is expense from the time the apples are purchased and put in coolers until taken out and sold, not counting the

actual storage charges. Apples never increase in size after being put in barrels, neither do drops change to hand-picked fruit from the tree. Repacking is sometimes necessary and very often expensive. Not because last season was disastrous to many firms do we claim that cold storage is being overdone, but desire to call attention to the abuse made of storing. Apples entirely unfit for the dryers were placed in coolers, many buyers became reckless, bought everything in the shape of an apple and seemed to think all that was necessary was to get them into barrels and in storage, then they could roll out fine fruit later on at a profit. "It may become necessary to enforce the same rule in apples as now in use by egg men; have the fruit inspected before allowing it to go into storage. The old saying, 'That a man can do as he pleases with his apples after they are paid for,' has caused many a man to fail. Experienced buyers last season refused to listen to the report of this convention, the very organization that is trying to assist growers and buyers. Horticultural papers are frequently at fault in urging the erection of cold-storage plants away from markets and advising growers to store their apples, and they obtain certain prices for their fruit. Gentlemen, while so many commercial orchards are coming into bearing in the West, with so many smaller orchards in the North, East and South, some different methods must be adopted for the grading and storing, some plan arranged to dispose of the inferior grades, a better understanding must be reached between the grower and buyer regarding the size of the crop and the quality of the fruit, and prices fixed which will insure fairness to both, or the day for profit in cold-storing apples is passed."

Apples in Steady Demand.

The supply of apples continues moderate, and previous estimates of a light crop of the early varieties appear to be confirmed. Most of the native fruit so far seems of poor quality. The best arrivals at present are from New York State. There are, however, some good nearby Williams and a few Astorians. These average \$1 to \$1.25 per bushel, with fancy lots higher. Apples which are teamed to market come mostly in bushel boxes for convenience, and the boxes are returned to the growers.

Native apples sent by railroad come either in boxes or barrels, the price received being about the same in proportion, either way. Boxes of large shipments may be returned to the grower. Box shipments, large or small, should be in bushel boxes of uniform shape. Boxes of odd shapes and sizes bring unsatisfactory results, as nobody likes to buy them, and a discount must probably be made. The approved style of box is square and has a flat top, which is put on at first and the box filled from the bottom, the layers being the slats being faced (stem up), after the manner of packing fruit in barrels. Pears are packed in the same way, the first layer being packed sides up.

Apple buyers are at work in same section at varying prices. Sales are reported in the Illinois orchard districts at \$1.90 and \$2, conditions not stated. The crop of three acres of a Wintport (N. Y.) orchardist has been sold at \$400, the crop being estimated at four hundred barrels.

A New York dealer said: "If every apple grower would conscientiously set about seeing how many bushels he could turn into the evaporators and would induce his neighbors to take the same step, it would be only a few years until all the choice fruit would command \$2 per barrel at the orchard. But will apple growers ever do this? No! Not until they organize local unions and provide rules for grading and marketing. Not until they learn that the buyers now control the situation and that the growers do not though they could. Not until they look upon their growing as a commercial proposition. Not until they learn as producers that 'scientific marketing' is of equal importance to 'scientific growing.' Apple growers can learn valuable lessons from the citrus and deciduous fruit growers of California who have no nearer market than two thousand miles and who must send their goods across the continent to find buyers. In the apple deal the buyers are close at hand, the markets are within easy reach, the consumers are within a reasonable radius. And the goods can be stored. Above all the surplus can be used."

Shipments to Europe have been large for so early in the season, nearly six thousand barrels leaving American ports last week, of which 575 barrels were from Boston. For the same week last year shipments were less by over one thousand barrels. The English apple crop seems to be nearly a failure, and the French crop has amounted to little.

Good Demand for Fruit.

Pears are in fair supply for the early part of the season, but the native shipments are as yet of rather low grade, the best varieties not being ready. Clapp's Favorite makes up the bulk of offerings; a fairly good cooking and table pear, but a very poor keeper after ripening and inferior to the Bartlett in every respect except earliness. They should be picked early and shipped while rather hard. Some native Bartletts are at hand and these, if good, bring top prices (\$1.50 or more per bushel), but many of them are small. The bulk at sales of pears are at \$1 to \$1.25 per bushel. The demand is moderate.

Plums are mostly from the Pacific coast, and the supply of these is large just at present. There are a few natives, but most of these find local markets at about \$3 per bushel. The California plums sold in Boston are mostly in eight-pound baskets and 25 cents per basket in large lots, with some choice kinds higher. Some very nice plums have been arriving from New York State.

Blueberries are in good supply, but the season for them is passing, and many are soft and poor. Muskumels and watermelons continue cheap and plenty.

A novelty in Boston is the alligator pear, seen last week in several stalls. It sells in a limited way as a salad fruit at fifteen cents retail. They are poor keepers.

At New York most apples are of regular quality, and meeting a slow market at low prices; positively fancy fruit is still in light supply, and occasional sales of such slightly exceed quotations. Pears are moving rather slowly and tone is slightly in buyers' favor. Black grapes are more plenty and weaker. Peaches not over plenty, but most of the offerings show defects either in quality or condition, and prices are quite irregular; strictly fancy are nominally steady. Plums are meeting a light demand at about previous quotations. Few blackberries are arriving. Huckleberries are a shade firmer. Fancy muskmelons are pretty well sustained, but many of the receipts were stale from holding over in the cars and prices averaged low. Watermelons are in large supply, but many are of low grade.

AN ATTRACTIVE FARM HOME.

Residence of George L. Erik, Wayne Co., Pa. See descriptive article.

Literature.

Charles G. D. Roberts is so pleasing an interpreter of nature and animal life that anything from his pen is sure to find a host of readers. It is not surprising, therefore, that the present publishers of his growing list of books should bring out in new form his collection of stories embodying life in the Canadian backwoods, which marked one of the periods of his development as a producer of veritable animal and nature classics. While "Earth's Enigmas" does not naturally rank in intrinsic literary value with "The Heart of the Ancient Wood" or "The Kindred of the Wild," the material is the same as that which this accomplished writer drew upon for his longer and more finished books. With the addition of three new stories and enriched by the drawings of Charles Livingston Bull, one of our foremost illustrators of animal stories, "Earth's Enigmas" is sure to have a wide reading. There are fifteen short stories in this book of two hundred and eighty-five wide-margined pages, and they vary from glimpses of the lives of the rough Canadian mill workers to those of the simple country folk of Nova Scotia. But it is perhaps the animal story, the struggle for life and death between the denizens of the forest or the triumph of the stronger over the weak that Mr. Roberts is seen at his best. There is the tale of the nursing lamb, who following close behind the ewe in an open pasture, was pounced upon by the mighty eagle, which fell upon the poor lamb. "The ewe wheeled and charged madly; but at the same instant the eagle, with too mighty buffeting of his wings, rose beyond her reach and soared away toward the mountains. The lamb hung limp from his talons; and with piteous cries the ewe ran beneath, gazing upward, and stumbling over the hillocks and juniper bushes." But the lamb fed the nest of eagles, and the ewe could only wander hither and thither over the round, bleak hill, calling pathetically for the missing lamb. One of the new stories which appears in the collection concerns the granddaughter of a backwoods Nova Scotian couple, who, from her early childhood, had dreamed of a life in Boston. Lydia lived on an old farm, appropriately named "Stony-Lonesome," with old John Cassidy and his wife, and although her young heart yearned for the big city of her dreams, she could not bear to leave them alone. Her mother had gone to Boston in her youth, only to return in shame, having been deserted by her lover. So Boston was a black horror to John Cassidy, who had never strayed far from the place of his birth. Lydia saw the other girls go away in their youth and return arrayed in fine clothes and with ready money, and "the poison was in her veins," as John Cassidy observed. "Oh, granddaddy, oh, gran'mother, if I could go for a little spell and try it, I know I could do well—I feel it in me!" I'd love to help you pay off that mortgage on 'Stony-Lonesome' that gives you so much bother every year." As her restless spirit grew John Cassidy began to think that it was not right for him to stand in her way. To remove himself as a stumbling block he planned to throw himself over some steep bank. This he eventually did, and the old horse jogged home faithfully but with no master in the wagon. Mr. Cassidy was found hanging from a tree, and his lifeless body was used to be in the balance while Lydia underwent a similar period of remorseful anguish. Of course the experience cured Lydia of her desire to go to Boston. [Boston: L. C. Page & Co. Price, \$1.50.]

This narrative, we are solemnly told in the prefatory note, was found among the papers of the late Col. Stanton Elmore, who left this country immediately after the downfall of the Southern Confederacy. The subtitle of the book is "A Memory of the Black Belt," and the MS. is "edited without change" by William Garrott Brown, author of "The Lower South in American History." The narrative concerns the career of Henry Selden and the hatred which Robert Underwood bore for this noble Southern gentleman. This hatred really dates back before the opening of the story proper, and all the events occurred previous to the civil war. Selden's father had killed Selden's grandfather, and the father of Robert Underwood, in a duel after he broke off Henry's engagement with Miss Margaret Underwood, because she was the step-daughter of Senator Underwood. The breach between the Underwoods and the Seldens families was kept alive by Robert, who was now in Congress, despite the noble attitude of Henry Selden. There came about a time, however, when Congress was about to pass a bill which would give a sum of money to a certain tribe of Indians to compensate them for land which it was alleged the late Senator Underwood had defrauded them of when he was a commissioner. In this bill the late senator's name was held up to the public in disgrace. Robert's personal enemies in Congress were practically sure of securing the passage of the bill when his sister Eleanor came to the Selden home as a guest of Miss Beverly Selden.

"I had heard my sister Margaret say that you loved my father, sir," said Eleanor to Henry Selden, "and that you and Robert, when you were boys, often went with him among the Indians. And so—and so, I thought you might know something of this charge and be willing to help us. I thought that perhaps a word from you to some of the leaders at Washington would have much weight, because it is so well known that your father—that Governor Selden—I mean—about the duel, sir."

And so it happened that Henry Selden came out of his solitude, re-entered political life after having lived in retirement for many years, was sent to Congress by his admiring constituents solely for the purpose

of preventing the name and memory of his father's antagonist from being smothered. Did Robert Underwood appreciate this powerful assistance,—this sacrifice of time and inclination on the part of the noble and self-sacrificing Henry Selden? Did he appreciate his own sister's efforts to enlist Selden's aid in saving from disgrace his father's memory? Here is his answer—words spoken in anger to his own sister in reply to a query from her: "We should have none to defend our father's memory if he were alive. From the son of the man who first slandered him and then killed him we can accept no favors. What madness could have induced you to go and beg this man's help in his own home I cannot imagine. But of one thing you must be sure; and I say it not hastily, but deliberately. Unless you come with me now, and free me from the ignominy of your association with these people we must part. You must choose today between them and me. The estate shall be divided, and you shall have your share at once." These are the men and women Mr. Brown presents to us in his picture of Southern life and character. There was sacrifice of the highest type in every step of Henry Selden's career—after the fatal duel, but nothing but enduring hatred dominated the life of Robert Underwood; and the mutual love of Selden and Eleanor Underwood capped the climax. There is a charm of style about this book which fascinates the reader from the beginning, and the two love stories which thread their way through a maze of hatred and self-sacrifice, give a sentimental touch to the narrative. The hero is the typical Southern gentleman so universally admired. [New York: The Macmillan Company. Price, \$1.50.]

William C. Edgar, the editor of the Northwestern Miller, has written a book entitled "The Story of a Grain of Wheat," in which he presents in a comprehensive manner the history of this king of cereals from the earliest times to the present day, and also "the wheat-fields of tomorrow." We are given in detail information about the wheat berry, the early history of wheat, the wheat market of London and the wheat-raising countries of the world, the progress of milling this cereal and the important matter of transportation. There are pictures in the book showing the cinch-bug and the grasshopper, two of the great enemies of wheat, and biblical references to "corn," the name given in ancient times, oftentimes when wheat was really meant. There are statistics showing the wheat production of the world, yields per acre in the various wheat-raising countries, and the fact is disclosed to us that the present ordinary consumption of wheat in the world is 340 million "quarters" (a quarter being eight bushels). Russian wheat, wheat raised in the United States and Canada, and the natural advantages of Argentina as a wheat-growing country are set forth, although, of course, most attention is paid to the United States. We are told, for example, that 1901 was a record-breaking year, when 721 million bushels were raised in this country. Wheat is raised in forty-three States and Territories. The development of western Canada as a wheat-raising country, the movement of farmers from the United States to these newly opened wheat fields, and the large investments of American capital in the Dominion are, says the author, creating a change in the sentimentality of the tariff question, and will doubtless have a pronounced effect upon the future political course of both countries. A duty of twenty-five cents per bushel on wheat prohibits the entry of any portion of the Canadian crop into the United States at present, but we are told that this duty is a detriment to the welfare and prosperity of the American farmer because the wheat grown in the Canadian Northwest has certain attributes lacking in United States wheat, and if the Canadian crop were freely received, it would give our mills, it would assist in marketing the American product abroad. This is interesting information which may in the future result in tariff changes. There is a great deal of other information in the book for one who is interested in wheat. The style of the book is conventional, but the facts presented lend themselves to serious treatment throughout. [New York: D. Appleton & Co. Price, \$1.00 net.]

Here is a book which will delight the hearts of every collector of old china. For the first time we have in permanent form complete information regarding Staffordshire, Wedgwood, Lustre and other English pottery and porcelain. The author is N. Hudson Moore. In honor of the many collectors of "old blue" the book is bound with blue cloth. There is a story of early pottery with some interesting information about early English collectors. The Staffordshire potters who are of chief interest may be said to have begun with Enoch Wood, generally referred to as "The Father of the Pottery," and after the Revolution, when America was anxious for more of the comforts and luxuries that she had heretofore craved, Enoch Wood seized upon the occasion and turned out for his pottery quantities of ware, serviceable, attractive and cheap. He made ware particularly for the American market, and used incidents and scenes which appealed in a peculiar way to a growing and patriotic nation. Blue was selected as a color for these designs on account of its durability and cheapness, and the tiny cuplets which we pay \$23 for today from a collector was made to sell for threepence or even less. There are three hundred pages of information for the collector in this book, and, most important, there are 120 illustrations of china which appeal to the collector and the non-collector alike. There is a copious index. [New York: Frederick A. Stokes Company.]

Popular Science.

An interesting French discovery is that an arc-lamp using carbons with a core of carbide of iron, will make blue-print and other photographic impressions three times as rapidly as a lamp with ordinary carbons.

After overcoming many difficulties, metallic calcium has been at last produced by Professor Borchers and a pupil, by the electrolysis of chlorides of lime. Reduced in cost from \$2500 to less than half a dollar per pound, calcium is expected to prove important in the arts, especially as a powerful reducing agent, and for freeing iron from phosphorus and sulphur, as well as oxygen.

A zone of fifteen degrees on a great circle between the Pacific coasts of America and Asia is found by M. de Montessus to include the epicentres of sixty-four thousand earthquake localities, and a like zone on a great circle running through the Mediterranean, Caucasus, Himalayas, India, New Zealand and the Antilles embraces eighty-four thousand epicentres. Beyond these zones centres of earthquake disturbances are comparatively few.

A new alloy for bearings subjected to heavy loads, such as those of railway axles, is described by G. A. Clamer as consisting of sixty-four parts of copper, five of tin, thirty of lead and one of nickel. The metal casts well and is easily worked. Its large proportion of lead greatly reduces wear, and when used as a bearing for a journal 3 inches in diameter by 34 long, run at 325 revolutions per minute and loaded to one thousand pounds per square inch, the loss in weight was but a fifth of a grain in one hundred thousand revolutions. Under the same conditions, the wear of gun metal of varying proportions of copper and tin was from 24 to 70 grains.

Remedies for sea-sickness are still being sought. It has been noticed by Otto von Guericke, a German, that the disagreeable sensation brought on by the downward motion of the ship, and he recommends that during this sinking motion a deep inspiration be taken to throw the abdomen forward and render it tense. This method and a light abdominal bandage seem to be equally beneficial. Particularly susceptible persons are advised to take two or three grams of sodium bromide in a glass of water daily for a week before the journey, and after starting to have meals regularly and of accustomed kind.

The experiments of M. R. Blondel seem to show that certain rays of sunlight pass through various kinds of wood, metals, etc. A fine tube of phosphorescent material—such as calcium sulphide—was made to glow by brief exposure to light, and it continued to shine in a dark room behind a half-inch oak shutter. Interposed behind a plate of glass, however, the brightness, which again increased when the plate was removed, and several plates of aluminum were then successively interposed without lessening the phosphorescence, but a thin layer of pure wax or oil caused it to disappear. The new radiations are known as "n" rays.

The unicorn, so long regarded as a fabled creature, was a horse-like beast with a single horn sticking out straight from its head, and it has been supposed that it was suggested by the rhinoceros. Prof. Wilhelm Boelsche points out that bones of a huge, horse-like beast that actually carry such a single straight horn are now known.

It is called elasmotherium, and it was a contemporary of the mammoth in the Rhine valley and in Siberia.

"Cataltypy" is the name given by German photographic chemists to the new process of printing without light. Hydrogen dioxide is poured over the negative, after which a piece of paper—sized or unsized, rough or smooth—is laid on, and by a contact of a few seconds this receives the picture, hydrogen dioxide being destroyed. Several prints can be made from a single application. The invisible image on the paper is developed by being drawn through a solution of ferrous oxide, when the protoxide is transformed into oxide, and the iron oxide gives a yellow positive. Instead of iron salts, those of chromium, manganese, etc., may be used, or pigments with glue solutions, giving a wide range of possible tones of color. The process is simple, the pictures permanent, and it is believed that a new epoch in photography has been reached.

"Science," says M. Herrera, "made a great step when she succeeded in obtaining imitations of crystalline, whose structure was once looked upon as an almost supernatural phenomenon. But the progress was still greater when she succeeded in preparing perfect imitations of organic bodies with inorganic material, such as calcium chloride, sodium phosphate and calcium carbonate—substances found everywhere. We cannot deny the importance of the six hundred organic substances extracted from plants, but neither can we deny that living beings proceed from non-living matter. The laws of chemistry are correct, living beings must be regarded as mineral colonies, and zoology and botany as chapters of mineralogy."

The theory of evolution is itself undergoing evolution. It was Darwin's view that species result from slow variations over long periods of time, but Hugo de Vries, a Dutch naturalist, has proven that new species may develop suddenly, almost explosively. With many failures he has succeeded in observing the phenomenon of abrupt biennial. This plant was raised in the botanical garden of Amsterdam from 1862 to 1868, and it yielded one new species in 1867, two in 1868, while in 1900 not less than eight hundred individuals of seven new species were produced from fifty thousand plants from seeds of the parent.

Among the creatures that have passed as sea serpents is probably the *Rhynchonella*, or ribbon fish. This is a deep-sea form, with ribbon-like body, long and oblong head, and a series of red dorsal spines that rise from the head like a mane and give it a very singular appearance. Individuals have been reported from various places on the European coast, and from South Africa, Hindostan and New Zealand. A specimen that was captured last winter after a storm, at Newport, R. I., measured twenty-one feet in length, with a probable weight of three hundred pounds, but others have been estimated at sixty feet.

An investigation extending over many years has shown H. J. Cambie that all ordinary clay loses its cohesive properties on being dried until nearly all its moisture is expelled. On being drenched with much water such clay becomes almost liquid mud; but clay that has not been so dried does not absorb more water, and loses only some of its outside particles in the washing. A block of the dry clay absorbed fifty per cent of its weight of water without change of form, suddenly collapsing into a fluid condition when the amount reached sixty per cent. Landslides and washouts seem to be largely due to this overlooked change in clay; and river bluffs remain unscathed because the clay has not been dried sufficiently to acquire the property of soaking up an excessive proportion of water.

The actinic rays of sunlight, and not the heat rays, appear to be the cause of sunstroke. A British physician recalls that a traveler in India, who had been suffering from sunstroke, the great heat of the furnaces was easily endured, and this man acted on his theory by protecting his body from the chemical rays by orange-colored clothing. In five years of subsequent severe exposure he suffered no ill effects from the sun.

British records show that one person in every 536 was insane in 1859, and that the average has steadily risen until now one person in every 299 is mentally unsound. Prof. H. W. White finds numerous causes for this alarming increase of lunacy. An important one is the lessening of the infusion of fresh blood into the race, immigrants being fewer than formerly, and the foreigners who do arrive are of less hardy stock than formerly, being mostly town dwellers of poor physique. Late marriages and marriages of weak and neurotic persons have their effect. Other leading causes are the increased use of alcohol, the survival of weak lungs that once would have died in infancy, the increase of town dwelling, unnatural excitement, over-education, late hours, badly selected and badly cooked food, and overworking.

An instrument for observing parts of machines having rapid motion has been made by Professor Hospitalier, a French investigator. It is designed to light up the rapidly moving parts—such as the exhaust valve of a high-speed petrol motor—with intermittent flashes of variable

Notes and Queries.

MILK IN MANUFACTURES.—"T. L." Napkin rings, hair combs, walking-stick knobs, brush backs and handles, cigarette cases and holders and a variety of other small objects are now being made of milk, according to a Paris correspondent. It appears that much of the cheap imitation ivory now in the trade comes from the cow. There are even alleged pearls worn in earrings, or in other kinds of so-called fancy jewelry, which are literally drops of condensed milk. A nobleman owning immense estates and large farms in the Loire Department has set up a factory for carrying on the milk industry. His cows produce some two hundred gallons of milk a day, two-thirds of which is sent to Paris in the season. But in the summer the demand falls off, while the cows continue to yield the usual quantity. Hence the ingenious nobleman's new factory. The casein obtained from the milk is converted under great pressure into a ductile substance called "lactine," the possible uses of which seem to be unlimited. It is this substance of milk which is replacing celluloid in the market as an imitation ivory.

THE WILD OSTRICH.—"Strut": There are just four regions in which the wild African ostrich is now found. He lives in considerable numbers in Arabia where he has been little hunted. In Africa his most northern habitat is the Sudan and the southern part of the Sahara from the Red Sea almost to the Atlantic Ocean. He does not live in the excessively moist regions of Central Africa, but in the drier countries between the Indian Ocean and the Nile he is found in considerable numbers. His fourth home in Africa is in the great dry districts of German West Africa, from the Atlantic Ocean more than half-way across the continent. He was long ago driven out of the third lands of Cape Colony, for hunters became too numerous for him. The fact that wild ostriches are so numerous in Africa, their plumage has unfortunately been the cause of their diminution among them; and the prospect is that in time they will be entirely replaced by the domesticated ostrich now living on the ostrich farms of Cape Colony, far south of any of the regions where the wild bird is found.

HARD AND SOFT WATER.—"Housekeeper": All cooks do not understand the different effects produced by hard and soft water in cooking meats and vegetables. Peas and beans cooked in hard water containing lime or gypsum will not boil tender, because these substances harden the vegetable casing. Many vegetables, as onions, boil far less tender in soft water, because all the flavor is boiled out. The addition of salt often checks this, as in the case of onions, causing the vegetables to retain the peculiar flavoring principles, besides such nutritious matter as might be lost in soft water. For extracting the juice of meat to make a broth or soup, soft water, unsalted and cold at first, is the best, for it much more readily penetrates the tissue; but for boiling, where the juices should be retained, hard water or soft water salted is preferable, and the meat should be put in while the water is boiling, so as to seal up the pores at once.

THE WORLD'S POPULATION.—"S. R.": According to the latest statistics, the population of the world is 1,544,510,000. Of these, 538,000,000 are Christians, 10,600,000 Israelites, 175,200,000 Mohammedans, and the remaining 823,400,000 belong to other religions. There are 300,000,000 followers of Confucius, 244,000,000 Brahmins, 120,000,000 Buddhists. For every thousand persons, there are 346 Christians, seven Israelites, 114 Mohammedans and 523 followers of other religions.

AGE OF ANIMALS.—"K. F.": Elephants live one hundred years and upward, rhinoceros twenty, camel one hundred, lion twenty-five to seventy, tigers, leopards, jaguars and hyenas (in confinement) about twenty, peacocks twenty, stags under ten, cow twenty, ox thirty, swans, parrots and ravens two hundred, eagle one hundred, geese eighty, hens and pigeons ten to sixteen, hawk thirty to forty, crane twenty-four, blackbird ten to twelve, peacock twenty, pelican forty to fifty, thrush eight to ten, wren two to three, nightingale fifteen, blackcap fifteen, linnet fourteen to twenty-five, goldfinch twenty to twenty-four, redstart ten to twelve, skylark ten to thirty-five, titlark five to six, chaffinch twenty to twenty-four, starling ten to twelve, gray seventy to 150, pike thirty to forty, salmon sixteen, codfish fourteen to seventeen, eel ten, crocodile one hundred, tortoise one hundred to two hundred, whale estimated one hundred, queen bees live five years, drone four months, worker bees six months.

THE HUMAN HEART.—"A. M.": The normal heart beats about seventy-five times in a minute, according to Harper's Weekly, so that an hour's record would be something like 4320 beats. Supposing that a man lived to be fifty, his heart would have beaten 1,827,000 times. If a son of this man, more robust than his father, should fill out the Scriptural allotment of three score years and ten, his heart beats would number 2,648,000,000.

Brilliant.

These old, eternal hills of Thine,
What mighty heart—their breast
What fullness of delight divine
Thy solemn stars bequeath!
When cheer and strength my soul doth lack,
Thy glory makes me whole:
Amidst thy summer I am glad to dwell,
The summer of my soul. —T. H. Gill.

So long and dark, so drear my path
O blessed Saviour, ere I knew
Thy loving heart, Thy precious love.
But now, dear Lord, I live for thee,
And through thy life my path be dark,
Thou art my light, my life, my joy,
With dying breath, I'll whisper low
For me to die, O Christ, is gain.
—Charles Ross Keen.

I cannot give my Maker
Rare gifts from wood and field,
For His are all the treasures
That earth and forest yield;
Nor yet on smoking altars
My costly homage pay.
Thy sacrifice I offer,
The service of today.

By land and sea I traveled wide;
My thought the earth could span;
And wearily I turned and cried,
"O little world of man!"

I wandered by a greenwood's side
The distance of a rod;
My eyes were opened, and I cried,
"O mighty world of God!" —F. W. Bourdillon.

While some with talents thus began,
He started out with only one.
"With this," he said, "I'll do my best,
And trust the Lord to do the rest."
His trembling hand and fearful eye
Gave forth a world of sympathy.
When all alone with one distressed,
And little children learned to know,
When grief and trouble, where he go,
He loved the birds, the flowers, the trees,
And, loving him, his friends loved these.
His homely features lost their trace
Of homeliness, and in his face
There beamed a kind and tender light
That made surrounding features bright.
When illness came, he smiled at fears,
And bade his friends to dry their tears.
He said, "O God, my God, and I confess
He made of life a great success."
—Frederick Journal.

It is the soul's prerogative, its fate,
To shape the outward to its own estate.
If right itself, then, all around is well;
If wrong, it makes of all without a hell.
So multiplies the Soul its joys or pain,
Gives out itself, itself takes back again.
—R. H. Dana.

POULTRY.

The Moulting Season.

Birds hatched in the spring are in full plumage by and before September, but they do not moult that year unless forced on to maturity by stimulating food and made to lay a batch of eggs.

Young birds moult far more easily than old birds. For instance, a yearling hen will sometimes get through her moult in five or six weeks, while an older bird takes three months and even four. In the utility poultry yard we usually allow the hens to moult only once, so the moult should be quite an easy matter. Deaths are very rare during moult, yet they do occur; but the danger lies in the birds run down and weak from the strain of changing their feathers being more susceptible to cold and damp or disease.

If a bird looks very sallow it is well to remove it and place it in a well-sheltered pen by itself, feeding on stimulating food and giving it a little tonic in the drinking water, as described below. When the moult is very obviously on it is well to start the breakfast of soft food again, if it has been dropped during the summer months, and add a little linseed meal to the mixture. It need not form more than one-seventh of the whole mixture.

A little meat or fresh scraps may be given with advantage. Good food at this time helps to keep the blood and bowels healthy, and even when on a grass run some lettuce or cabbage leaves should be given them daily, if available; failing garden stuff, a beet cut in halves and thrown down or hung up in the run makes a good substitute. Finally, put a piece of sulphate of iron about the size of a walnut in a gallon of water, and add ten drops of sulphuric acid, and give them this to drink in an earthenware drinking fountain. These little matters may be often quite unnecessary. Indeed, often fowls, especially young fowls, moult almost imperceptibly; but, again, they may moult badly, and the tonic and green stuff and the feeding recommended will help them through.

Eggs Tending Upward.

Demand for fresh eggs holds good and the supply is at best moderate. Prices have risen one to two cents in the principal markets of the country.

At Boston the best grades bring 25 to 27 cents and good Eastern stock 20 to 22 cents. Western stock has not advanced much, buyers not being eager for eggs shipped long distances in summer. This summer Western eggs have arrived in better condition than usual at this season.

Many eggs are still going into storage, buyers evidently waiting for a profit even at the present advance. Estimates of the stock in cold storage in the United States range from 3,500,000 to five million cases. The larger estimate would be about one-twelfth the total estimated annual production of the country. The egg man of the Produce Review says: "A close study of the weekly clearance of our receipts during July, and comparing these observations with the reported use of refrigerator eggs, enables me to estimate the present weekly consumption in this market at about sixty thousand cases a week; this is unusually large for the midsummer season, and gives reason to predict that the first of September will find us with fully fifty thousand cases less storage eggs on hand than we had at same time last year, unless the August receipts should prove abnormally large."

On the whole the situation favors a continuance of moderate but not high prices through the fall season. Any great advance would be checked by sale of storage stock. In fact a good deal of early storage stock has already come out tempted by the prices now offered.

Poultry a Great Industry.

The value of all products of animal origin in 1899 (wool, mohair and goat hair, milk, butter, cheese, eggs, poultry, honey, wax, animals sold and animals slaughtered) amounted to \$1,718,950,221.

Poultry and eggs, which formed 16.3 per cent. of this great sum were outvalued by two of these products only—dairy products (milk, butter and cheese) and animals sold. The item of wool, which is ever a matter of concern in the commercial world, and which is so important as sometimes to become the shibboleth of a political campaign, was worth but \$45,723,739, being \$91,108,138 less than the value of the poultry sold, and \$98,563,232 less than the value of the eggs produced, and less than one-third the value of these two combined. Animals slaughtered on the farm were worth \$22,981,433 more than the poultry product and \$45,586,940 more than the eggs produced, but the animals which were slaughtered were worth \$91,304,937 less than the poultry and eggs taken together.

The poultry and egg product of 1899 exceeded in value the wheat crop of twenty-eight States and Territories. There were produced on farms in 1899, 1,293,818,144 dozen eggs. This amounts to 43,127,272 crates of thirty dozen each. An ordinary refrigerator car, which has an average length of about 42½ feet, holds four hundred crates. All this means, then, that a train of these cars sufficient to carry the product of 1899 would be 838 miles long, or long enough to reach from Chicago to Washington to have several miles of cars to spare.

These figures and statements are taken from a very interesting report of the Bureau of Animal Industry, edited by George Fayette Thompson, M. S. He gives the number of poultry of all species in Massachusetts in 1890 as 1,680,823. Adding those under three months old, they were valued at \$1,018,119, while the value of the products for 1899 was \$3,979,022. Of the latter sum, \$2,571,341 represented the eggs produced and \$1,407,681 the poultry.

All animal products for 1899 were valued at \$19,140,730, and poultry and eggs comprised 20.8 per cent. of this sum. Excepting dairy products (milk, butter and cheese) valued at \$12,985,744, the poultry and eggs exceeded in value all other animal products.

POULTRY KEEPING.
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KEEPING POULTRY.

A 48-Page Illustrated Book, Telling How to Do It, and All About Profitable Poultry Raising.

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Sent to any address on receipt of twenty-five cents. Stamps taken. Mention the PLOUGHMAN.

WALNUT COMPANY,
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by \$1,703,058. Although the figures show fewer poultry in 1900 than in 1890, owing to the fact that fowls under three months old were not included, the production of eggs increased from 8,931,368 dozen in 1890 to 12,928,630 dozen in 1899. The average price per dozen of the eggs in 1899 was 19.9 cents.

Horticultural.

A Successful Chestnut Orchard.

The largest chestnut orchard visited by me under direction of the New York Forest, Fish and Game Commission, was that of Mr. J. T. Lovett at Emille, Pa., about five miles from Trenton, N. Y. This orchard is also in the fine farming country along the Delaware river, and is a chestnut "orchard" in the true sense of the word. It is an interesting fact that the farm upon which this orchard is located has been in possession of the Lovett family since 1890, and that they still hold the original deed bearing the signature of William Penn.

The orchard is in two distinct parcels, the total acreage of which is about twenty-two acres, containing some 1200 trees from four to thirteen years old. The trees are nursery-grown seedlings, some of them having been grafted in the nursery, but most of them were first set out and then grafted in their second or third year. The third year is best because they are better established then, and are more able to withstand the shock of grafting.

They are set in rows thirty feet apart each way, and at present the ground between them is cultivated, and this year was growing a crop of corn. The whip graft was the method used and it seemed very successful. It was not thought necessary to wrap the joint with waxed muslin, as ninety per cent. took without this precaution. The thirteen-year-old trees are now some six to eight inches in diameter, and bear as high as a bushel of nuts yearly. The illustration, originally secured for the Forest Commission, shows the present appearance of Mr. Lovett's trees, aged four to thirteen years, mostly of the Paragon variety.

The Paragon is the favorite because of its great bearing qualities. The burs are carefully picked off from the young trees, as it has been found that if seedlings are allowed to bear profusely before they are confident that he is on the road to success, and are liable to die. Whether this would be true in the case of grafted sprouts is uncertain. In the fall when the burs begin to turn yellow and open a little so as to show the nuts inside, they are picked just as apples would be and spread out in the sun to dry. There is a great demand for the nuts, the whole crop last year selling for \$10 per bushel. Much time and expense have been expended in getting the orchard in its present fine condition, but the owner is confident that he is on the road to financial success. Weevils are mentioned as the only serious enemy. In addition to the grafted field trees Mr. Lovett has about twenty-five thousand one and two-year-old ungrafted seedlings in his nursery.

ERNEST A. STERLING,
Forester New York Forest, Fish and Game Commission, Albany, N. Y.

Apple Season 1903-4

Chester R. Lawrence: Regarding this season's apple crop there promises to be a yield not much below that of last season. Taking all conditions into consideration I find that prospects for prices are not as good as last season. I do not expect to see such a wide range of prices as ruled last year. The low prices of the past season may be reached, but I doubt if the extreme figures are seen for this year's crop.

It would be best again this season to export only the best fruit, for, as last season, the smaller quantity of really choice stock will return more than a larger quantity of inferior apples. If you must market under-grade stock dispose of it as near home as possible and with as little expense as possible.

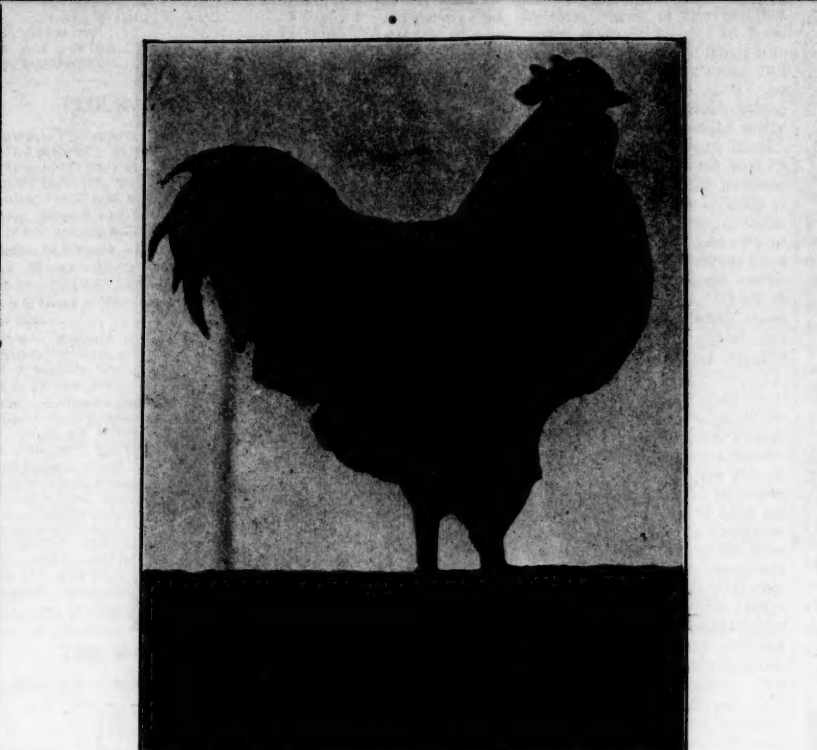
Since our last letter we have received a cable from our London house in Covent Garden, advising us that the Gravensteins ex. S. S. New York, sold at \$4.86, and there was a most excellent demand for good quality American apples. The California fruit on this boat was sold by our London house for higher prices than the previous shipment and the first shipment netted \$7000 more than did the initial shipment last year, so one can readily understand how satisfactory European markets will be for American fruit this year.

Messrs. James Lindsay & Son of Glasgow advise by cable as follows: Steamer Astoria landed her cargo in condition for export, a good many of the barrels showed signs of rot, and they do not advise shipments of any inferior apples, as the results will not be satisfactory to the shipper. They quote Gravensteins at \$4.86 to \$6.31. Our Liverpool house cables that the market is most excellent for good quality fruit. Boston shippers commenced last week, but not heavily, and a good demand is looked for. Low returns from this market average from \$2.50 to \$3.25.

People of various occupations often speak of "going to farming," as if to make up their minds to become farmers is all that is needed. But living on a farm for a longer or shorter time is not necessarily farming, as many a failure has discovered. An unskilled, incompetent farmer will take the same low standing among his fellows as an ill-trained mechanic or clerk or a quack doctor. Even the possession of money will not prevent a good deal of rather contemptuous laughter over his tactless efforts and his ignorance of detail. Fortunately, however, farming is one of the very few occupations which is more or less natural to mankind, because of the strain of farmer blood which is the foundation and strength of most families. The requisites are good health, enthusiasm, persevering industry, some capital, plenty of good sense and a fair knowledge of the business. The more ability, character and intelligence can be added to these the higher the standing of the farmer.

Golden Chronicle.

Mr. Joseph Pulitzer's gift of \$2,000,000 to found a school of journalism at Columbia University is, indeed, a princely one. There are those who doubt the practical value of such an institution, and who believe that journalism can be learned thoroughly only in a newspaper office. This may be true to a certain extent, and yet, a young man specially trained, providing he has natural aptitude, will be better prepared to begin the practice of journalism than the one who has to gain all his knowledge by an apprenticeship in either the business or the editorial offices of a great journal. Indeed, there is now a disposition in the offices of the leading dailies to avoid teaching novices, no matter how much general education they may possess. A preference is given to those who have gained their experience on out-of-town papers over college graduates who are ignorant of the executive details of a large



A PEDIGREE PLYMOUTH ROCK.

Best Barred Rock Cockerel at the Maine State Poultry Show, and sired by 1st prize Cockerel of the stock of the preceding year. Owned, bred and photographed by E. E. Peacock, the Barred Rock Specialist, of Kent's Hill, Me.

journalistic establishment. Hence the man who has come up from the compositor's case is often given a "show" before the college graduate who has taken high honors. There is no time to instruct in the rush and drive of daily journalism, and the man who accepts a position on a city daily must be familiar with newspaper work. It is true that the college man may be more generally well informed than the other, but he lacks the technical skill which can be immediately utilized, and with all his academic drill he cannot take a place at once at a desk or in the editorial rooms in a satisfactory manner. No doubt he will learn quickly enough if he gets the chance, but he is sometimes discouraged by the hope deferred which makes the heart sick, and he drifts off into other callings where he can make use of his talents and attainments. This is, perhaps, not a cause for regret, for of all businesses, or professions if you like, daily journalism is the most exacting and the most poorly paid, considering the time that has to be devoted to it, though more money can be earned in it at the start than in either law or medicine. In a great city like New York it makes men old before their time, without any adequate provision for their support, if their health is broken down by continuous application. As a stepping-stone for something else, journalism does well enough for a time, for it sometimes lifts a man into public office, through acquaintance with prominent men, but except for the very few who get the prizes, it is not to be recommended as a calling promising any large pecuniary results. It sometimes develops successful poets, novelists and playwrights, though they may never see the inside of a newspaper office. But journalism, like acting, is always clothed with a certain glamour in the minds of the inexperienced, and many young men are anxious to penetrate into the mysterious regions where papers are made, with the fond hope of distinguishing themselves and winning fortunes. Here, as elsewhere, the many fail; the one succeeds. But since men will run in where angels fear to tread, it is well that they should be well prepared to meet all the difficulties that will confront them, and, therefore, Mr. Pulitzer's plans for the establishment and endowment of a school of journalism are worthy of all praise. The school, it is hoped, will be running in 1904, after the building, which it is to be devoted to, has been completed. The course will include two years of study, and to take it a young man need not have been graduated from college, but he must have enough intelligence and education to pass the preliminary examinations, and his moral character must be above reproach. Mr. Pulitzer, in his announcement in his paper, the New York World, says: "Students purposing to enter upon the career of journalism will find accessible here courses of study that will for this profession be equivalent to what other professional schools supply for other professions; while young men already engaged upon the newspapers and desiring to advance themselves more rapidly by the cultivation of their aptitudes may find in these courses a valuable assistance."

President Eliot has outlined a practical scheme of instruction for the school, which is certainly comprehensive enough, though it may not be adopted in its entirety. Mr. Pulitzer's efforts to start the first important school of journalism in this country is deserving of unstinted commendation, and if it is not successful it will not be for lack of a munificent endowment. But it promises to meet all his expectations, for he has shown rare discretion and judgment in selecting seven members of a board of advisers, which will be enlarged hereafter. The gentlemen already chosen are Nicholas Murray Butler, president of Columbia University, ex officio; Whitlaw Reid, John Hay, Secretary of State; St. Clair McKelway, Andrew D. White, Victor F. Lawson of Chicago, Gen. Charles H. Taylor, Sr., of Boston, and Charles M. Eliot, president of Harvard University. President Eliot cannot serve on the permanent advisory board, but he can be consulted always by the members already named, who, with their future associates, will be nominated to the trustees of Columbia University at their October meeting. With a \$200,000 building on Monmouth Heights and plenty of money at command to pay for its maintenance, there is no reason why the school should not soon pass out of the experimental stage and be a perpetual memorial of the liberality and public spirit of its founder.

The Society of Colonial Wars will dedicate on Sept. 8 the monument erected in the State park near the head of Lake George. This will consummate the proposition inaugurated on the centennial anniversary of the battle of Lake George, four decades ago. The fight which the memorial will recall was the only military success of the campaign of 1755 and Braddock's defeat, while it also created unity among the American colonies, and paved the way for the war for independence twenty years later. The monument consists of a bronze group, representing the Indian King Hendrick demonstrating to General Johnson the wisdom of dividing his forces, and was designed by Albert Steiner. Frederick J. de Peyster of New York, as governor-general of the Society of Colonial Wars,

will present the statue on behalf of the committee on the Lake George celebration to James Williams Beekman, governor of the New York Society of Colonial Wars, who will, in turn, deliver it to Senator Chauncey M. Depew, to be by him transmitted to Governor Odell for the State. Prominent men are expected to be present from other States at the ceremony, as well as some companies of the Federal army.

That eccentric Southern anti-slavery reformer, Gen. Cassius M. Clay, or "Cash" Clay, as he was more familiarly called, left six wills which have been offered for probate. One will contains this paragraph: "The Whitehall lands and fixtures of 300 acres shall remain, including houses, trees, etc., forever the same intact—finest natural park on earth. It shall be in fee simple the property of the United States of America in trust for the inhabitants of this earth. It shall be so long under the care of my executors as may be deemed best by the Federal Government, and then be under their direction and support in the purposes of this legislation." He also made a provision for the maintenance of the park by setting aside about three hundred acres of coal mines owned by him in Clay County, Ky. The old warrior no doubt meant well, but we are afraid it will be some time before the United States gets possession of the park, for his relatives are trying to prove that he was always insane, and was not in his right mind when he became a follower of William Lloyd Garrison.

Some people have curious ideas of economy, as I have before observed in this column. Especially in the matter where spirituous liquors are concerned. I was on a salt-water excursion recently, and a young man objected seriously and strenuously to the price he had to pay for drinks at the steamboat bar. He averred that he would not stand such extortion, as he was prepared to call the charge for "John Barleycorn," so at the first landing-place he went ashore and purchased a quart of whiskey, which he took to his stateroom, inviting every one in the immediate vicinity to imbibe. The bottle was emptied before the vessel left port, and I wondered how much the youth saved by his fit of frugality, considering that he broke the big blade of his new pearl-handled penknife in endeavoring to use it for a corkscrew. The last time I saw him he was making a bee line to the head of the wharf for another flagon of old Scotch. Probably during the night he rolled as much as the steamer did, for I heard suspicious noises coming from the direction of his compartment.

On the evening of my return home I happened to drop into one of those places where you get a full meal for twenty-five cents. The last course was an infinitesimal piece of pie. The man who sat opposite me looked at his portion of the American delicacy rather dubiously, but finally devoured it at one gulp—bolted it, as Joe, the gigantic blacksmith of "Great Expectations," might say. Then he called the waitress and exclaimed:

"Mary Jane, bring me another piece of pie of precisely the same size as the last one."

The foregoing reference to Dickens reminds me of Tony Weller said to his vivacious son, "Samwell, beware of the riders," or words to that effect, and this recalls to my mind a young woman who is lamenting in deep weeds the loss of a husband whom she married for his wealth, the wicked gossip says, and nothing else. I met yesterday a former admirer of the woman in the days when she still indulged in maiden meditation, fancy free, and I said:

"How is Mrs. Blank enduring her heavy affliction?"

"Fairly well," was the answer. "At first she was inconsolable, but when I called the other day I saw that she was really beginning to take notice."

If she smiles on him at his next visit I shall surely begin to think that in the frolicsome future he will be a rich man. The moral of all this is that we often pile up money for the other fellow to spend.

Talking about the financial wherewithal that makes the wheel of society go round, and occasion not long since to inquire about an acquaintance who was dangerously sick. The person of whom I sought information was his sister-in-law, and in answer to my question, she said:

"Yes, I'm afraid poor Thomas will die, but he will leave my sister a very rich woman." The incongruous character of her remark amused me in spite of the solemnity of our interview, and I hurried away to hide the smile that I knew would undermine in a loud ha-ha. Luckily, the sick man recovered, and his wife will have to postpone being a wealthy widow for some time, if, indeed, she ever arrives at that distinction, for I hear her husband came near going under in the recent slump in the stock market.

What are riches, after all? I have known people credited with being worth millions of dollars who thought themselves poor, and it's a proverbial reflection among tradesmen that it is harder to collect a bill from those who are supposed to have retired with large fortunes or who have inherited great wealth than it is from the ordinary merchant comparatively small income, for he recognizes that his brother business man has to pay his help every week and meet other expenses just as promptly. The rich idler,

who never goes without anything he wants if he can get it, will put the account collector off from week to week and from month to month with the cool remark:

"I will pay you as soon as my dividends are cashed."

I was in a shop yesterday, when the proprietor came in greatly flustered.

"What's the trouble?" I asked in a sympathetic voice.

"Oh," was the rejoinder, "I have just learned that Billionibus started today on a trip round the world and will be gone a year."

"But how does that affect you?" I inquired.

"Badly," was the response. "He has failed to settle with me for the decorations of his last party, though he promised to give me a check this week. I hope he will sink to the bottom before he gets back," continued my friend, incoherently and inconsequently as he lamented that his other well-to-do patrons were all out of town and would not give him a cent until late in the fall. "Hang it all," he exclaimed fiercely in conclusion, "I'd rather keep a peanut stand and get cash for my wares than do a credit business with the Four Hundred."

—Reports from different mountain towns in Bennington County, Vt. are to the effect that the advanced price in lumber has been a great boon to them, as the mills are hard at work supplying the demand. Timber that a dozen years ago would not be looked at, now finds a ready market. Tyler D. Goodell of Readsboro, who controls about 350 acres of timber land, has indicated that he will sell his timber in his vicinity, promising them work enough in the woods to partly pay for their purchase. In the neighboring town of Hoosick parties from Gardner, Mass., have purchased about nine hundred and thirty acres of oak logs, which are being sawed there and then shipped to Gardner by rail.

—A side hunt for crows was got up in Illinois lately, and a total of 1013 birds were killed, of which 283 were crows. These birds have so multiplied in many localities as to become a serious nuisance.

—The Chinese have lately established an office of commerce—a kind of board of trade and agriculture, which has for its object the development of China's resources and the extension of its internal and foreign trade.

—A Southern farmer read the following advertisement in a Western paper: "Send \$5 and learn how to get a pound of butter out of a quart of milk." He sent the money and received his recipe: "Take a pan and pour a quart of milk into it, having first placed a pound of butter in the centre of the pan. Lift the butter out."

—Commerce between the United States and Canada was larger in the fiscal year just ended than in any preceding year. This is true both as to imports and exports. The figures of the year's commerce, presented by the Department of Commerce and Labor through its Bureau of Statistics, show that the imports from Canada amounted to \$54,609,410, and the exports to Canada, \$123,472,416. In this term is included British Columbia, Quebec, Ontario, Nova Scotia and New Brunswick.

German papers report the discovery by Mr. Edmond Mollard, a Frenchman, of a new metal called "selenium." According to the English M. chancie, the discoverer claims that selenium costs but one-twelfth as much as aluminum and is lighter and stronger. It does not rust, and is therefore suitable for use in shipbuilding, for the manufacture of pipes, and for railroad construction. On account of its cheapness—as it is capable of a fine polish, resembling nickel—it would be desirable for manufacturing cooking utensils.

—Prof. A. G. Guley of the Connecticut Agricultural College feels confident that Connecticut will make the best possible exhibit of any New England State at the St. Louis Fair. The professor collected and will be kept in cold storage in this State until the opening of the exposition. Facilities for cold storage will be provided at St. Louis, and the exhibit there will be kept in shape by new supplies.

An August hundred persons attended the Coleridge field meeting of the Massachusetts State Grange, Aug. 6. Among the speakers was State Master G. S. Ladd, who said he thought the Grange organization had taught the farmer and his wife to have faith in their calling, to believe in the success of seed time and harvest. Dep. Master of Amherst thought the meeting might prove helpful, especially in the opportunity it gave the farmers to talk over what they might do to help out the light crops of corn, tobacco and potatoes. The bottle was emptied before the vessel left port, and I wondered how much the youth saved by his fit of frugality, considering that he broke the big blade of his new pearl-handled penknife in endeavoring to use it for a corkscrew. The last time I saw him he was making a bee line to the head of the wharf for another flagon of old Scotch. Probably during the night he rolled as much as the steamer did, for I heard suspicious noises coming from the direction of his compartment.

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to health, the fowls will be ordered returned or destroyed. The shipments delivered are some Irish stout, Belgian canned peas and Danish smoked sausages. It is not claimed that the peas are adulterated, but that lead has been used in soldering the cans and that this lead comes in direct contact with the contents. This is not allowed under the laws of Canada, and therefore under the new food law the merchandise cannot enter this country.

—The total sales of wool reported since Jan. 1 amount to 43,314,500 pounds domestic, 22,376,074 pounds foreign, aggregating 65,690,574 pounds, as compared with 68,570 pounds domestic, 21,304,000 pounds foreign, aggregating 89,894,574 pounds during the corresponding period last year. The shipments of wool from Boston for the week were 5,238,296 pounds, as compared with 4,965,614 pounds last week. The shipments since Jan. 1 have been 136,243,371.

—Nurserymen near Topeka, Kan., lost millions of apple seedlings this year on account of the heavy frost. There are more seedlings grown in that section than any other.

—The buying agents of the Gullford canning factory, who have been through the lower Middlesex County towns in Connecticut during the past few days, report that there is every prospect for a large crop.

—In the vicinity of Medina, N. Y., water five inches deep has been standing in the bean fields, which will very materially shorten the crop of white beans in that section.

—The Gilt Edge Buttery Company of Maine is in trouble. Frank W. Sander and Albert Duncker of Montgomery County, with other shippers of butter, have brought suit. About \$1000 worth of butter has been attached.

SARATOGA A SCENE OF GAYETY.

Twenty Days Racing at the Popular Spa.

Saratoga, the dashing resort, the sporting spa, the health-giving haven, where weary mind and worn-out frames find health and delight in the pure atmosphere and the gushing springs, is now at its season's height. Racing has commenced, and for twenty days a grand scene typical of American sporting life can be witnessed at the famous spa. The thoroughbred horses, fine limbed and perfectly shaped, the speediest in the world, the midjet jockeys who have gained fame in France and England; the millionaire who de serves his Wall-street office for the exciting race track, the fashionably dressed ladies of Chicago, New York and Boston society, they are all here, and they depict a scene which is strange to every one but the summer Saratogian.

Note the excitement and enthusiasm at the track, the noise and bustle in the betting ring, the cheers when a favorite wins, the tense silence and the following thunderous roar and shout when a straggler, following the bunch, plods grimly on, ere the half is reached he is going forward, he advances, gaining, still onward through the field, on the outside at the turn, second in the stretch, and in a whipping finish is victor by a head. This is an every-day scene at Saratoga Springs.

In the evening there is a continual promenade on the beautiful and spacious Broadway, Saratoga's Pennsylvania avenue, hundreds walking up and down, the hotel verandas crowded, their magnificent court yards scenes of festive gayety, the dazzling fountains cooling the breezes for the laughing throng, while the strains of sweet music wafted from the hotel orchestra as would please old Orpheus himself.

In the morning the proper thing is first a visit to the famous springs, a run across to Congress Spring Park, but see, you are not the first to quaff this purest of nectar. It really seems as though the throng of ladies and gentlemen had come with the first rays of the approaching day for it is yet but 6:30, and hundreds are sitting at the tables drinking this sparkling water.

After breakfast a ride on the cars to the beautiful Saratoga Lake, while away an hour in the rustic theatre or in a sail over the smooth waters, then continue on your trolley trip and ramble through the nearby historic town of Schuylerville, Gates, Burgoyne, Stillwater, etc.

This is one day at Saratoga, the most brilliant, the grandest, the sparkling resort of America. The Boston & Maine Railroad runs through cars Boston to Saratoga, and tickets during the summer months, Boston to Saratoga can be purchased at a round trip rate of \$3.00.

GRAVES' MANGE CURE

For Dogs, Cats, Horses, Cattle and Sheep. All Skin Diseases they are subject to can be cured by this valuable remedy. Also

GRAVES' MEDICATED SOAP

For Fleas and Lice for Dogs, Cats and Horses. Sure to kill them quick.

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JAMES BROTHERS, PUBLISHERS, BOSTON.

THE ANGORA CAT.

A Superb Edition, Beautifully Illustrated, Telling How to Select, Breed, Train and Manage Them.

Only book of its kind. Contains most important chapters for the Origin, Breeds, Training, Care for Fleas and Biting Insects, Proper Food, Care for Mating, Exhibition and Transportation, The Bench, Washing and Grooming, Diseases, The Correct Type, Different Colors, besides interesting stories of how they eat, drink, play and sleep; in fact, everything about them. Over thirty-five full-page illustrations of the most beautiful specimens of the breed.

"A Forgotten Prisoner," "Her Wants Supplied," "Attitude to Life," "The Housewife's Cat," "The Story of the 'Swiss Cat,'" "A Hospital Cat," are all interesting tales. The volume, aside from being an excellent reference work, is a most delightful gift book. Edited by Robert Kent James.

No author could be more just to speaking on his selected topic, as one having authority, that is, a thorough knowledge of the cat and its habits, and but their excellence, to the skill, care and knowledge of this well-known breeder. The book contains much useful information as to the diet and general care, it being, in fact, a work that is indispensable to every owner of one of the valuable and beautiful cats.

"It comes from a practical breeder. Prospective breeders of Angoras will find this book interesting reading."—Country Gentleman.

"Those who are lovers of cats will find much that is interesting and instructive in this book."—School Education, Minneapolis.

"It seems to us a book which those who are fond of cats will be glad to read."—Country Gentleman, Boston.

Angora and other cats. It is lastly found and full of interest. "Our New Cat," "Our New Cat," "Volume of highest authority, exceedingly interesting, full of facts, beautifully illustrated."—American Cattleman, Boston, Mass.

Price, postpaid, \$2.50. For sale by booksellers or sent direct.

JAMES BROTHERS, Publishers
222 Washington Street, Boston, Mass.

MASSACHUSETTS PLOUGHMAN

TELEPHONE NO. 3787 MAIN.

Tourists are ripe.

Fall is coming. The first football schedule has blossomed.

Yes, the Peekaboo Waist seems a very proper name for a modern feminine garment that we have all seen and noted.

Many a schoolboy will at least thank the school for having made him able to read Goldwin Smith's opinion that school children are overtaxed.

The expression "beating the band" acquires a new significance in virtue of the strained relations between the Marine Band and the Federation of Musicians.

The opportunity is now offered our contemporaries to declare that real Bostonians deserve comparatively little credit for crossing the Arctic circle in an automobile.

The report that the wireless has been made the medium of telegraphing a money order opens up great possibilities for the American college undergraduate steaming home after his vacation.

It was a man named Rose who fell into a sugar vat the other day and came out completely sugar-coated. A sugar-coated man is curious enough, but a sugar-coated Rose is even more suggestive.

Organized opposition to Mr. Booker Washington's theories will hardly injure Mr. Washington's influence and will probably do a good deal toward educating his people to think about them.

Mountain climbing has cost the climbers some 150 lives already during the present season. The fact, however, need not discourage anybody from adventuring the new trolley line out at Blue Hill.

Milwaukee is working over an ordinance to establish a legal standard for boarding-house food. Having been made famous by her beer the city is evidently determined to clinch her fame by making an equal bid for the superexcellence of her hash.

The outlook for sheep raisers seems favorable. The foreign trade in mutton is likely to be good, since Australian competition has been checked by the droughts and New Zealand stock has been drawn upon heavily to restock depleted Australian flocks. The wool branch of the business is also active and promises to remain so for the present.

How about the gramophones on the Charles? Now that the Park authorities are determined to enforce one kind of decency isn't it just possible that they may try to enforce other kinds? A gramophone in a canoe may be perfectly novel and yet make life very unhappy for a great many persons who have advanced a step further in civilization than the owner of it.

The boom in Western farm land has been gradually subsiding the past few months until prices are reaching a more reasonable level. Even the speculators were beginning to feel that something was wrong when raw land remote from market was selling higher than improved good Eastern farms in the best localities. The recent drop in values will check speculation and inflation, and render more secure the position of the real farmers.

One of the advantages of carrying a gun in St. Louis is that you can use it to stop the trolley car. In fact, a man who had stopped a trolley after several unsuccessful efforts by pointing his revolver at the next on-coming motorman was afterwards acquitted in court the other day, and the precedent is apparently established with full legal sanction. Visitors to the World's Fair will therefore do well to take their "weapons."

Mayor Knotts of Hammond, Ill., who is in a fair way to being nicknamed Nuptial Knotts on account of his efforts to persuade local merchants and manufacturers to employ only married men, is evidently unfatigued by his vices. Unfortunately, the owner not only fired upon his ungrateful guests, but also shot some of the sheriff's posse that started to capture him after the first shooting. The affair seems a clear combination of just anger first and ignorant panic afterward.

The latest food fad is the "embalmed apple," a Chicago product which is said to give to the person who eats it a sensation of having sampled something resembling the surface of fly paper. The Chicago fruit inspector has an effective way of disposing of spoiled or unwholesome fruit. He carries a small kerosene can and pours a little of the oil on fruit which does not meet his approval. Possibly here is a hint for the oleo inspectors.

Free mail delivery is as popular as ever, and the number of routes is likely to be doubled the present year. The service as a whole is no doubt efficient and satisfactory, despite the recent scandals connected with the Washington management. But until the whole thing is conducted on a strictly business basis, there will be little use in urging further extension of Government control to include railways, telegraph lines and express companies. The people would as soon be robbed by trusts and monopolies as by a set of boodling Government officials.

The Vermont Board of Agriculture has been getting out an elaborate booklet showing many of the attractions of the State as a tourist resort and place of summer boarding and residence. Thus the summer boarding business officially confirms its place as a recognized branch of agriculture in Vermont. Some of the Maine seashore towns have likewise been publishing some interesting literature along the same lines. The invitation of a Community" issued by the improvement society of Machiasport, Me. fully describes and illustrates the scenery, history and other features of the town. These are business-like methods and will

doubtless help to attract the prosperous business men of the cities. There are scores of attractive towns which might become flourishing summer resorts and afford the best of local markets for farm produce provided the advantages of the place were made better known.

The express companies comprise almost the only branch of the transportation industries which has shown no great tendency to join in forming a trust. The reason is plain. When parcels are sent over two or more express lines all the companies concerned may each charge full rates and thus tax the shipper at both ends of the route and in the middle. An express combine would be compelled to readjust rates with some decent regard to actual distances. While such a revision of rates would greatly stimulate many kinds of business, especially the shipment of live stock and farm produce, it might not at once increase the net profits of the carriers. Hence the lack of a trust in the express business. It is more profitable to agree to disagree, and, in fact, it appears that the companies have actually started to divide up the territory in such a way that each concern may fleece the public to the utmost. The only apparent promise of relief is in the possible addition of a parcel post service to the Government mail system. Competition of this kind might soon bring the express companies to terms.

The frequent occurrence lately of fires in which uninsured farm property has been destroyed must disturb the peace of many farmers whose buildings are unprotected. The seriousness of a fire loss comes close to tragedy, when a hard-working man who has worked the best part of his life to raise the mortgage is obliged to shoulder the debt again because his buildings have gone up in smoke with a forest fire or a lightning stroke. Even if there is no fire, the money paid for premiums is repaid in the sense of security afforded by an insurance policy. But there is another side to the question. Beyond doubt a very large number of property owners in villages and farm districts have rebelled against the recent exactions of the insurance companies. The rates for a three-year policy are about as high as the sum paid for a five-year policy half a dozen years ago, an advance of from sixty to seventy per cent. Rented farms are discriminated against very severely. Buildings left unoccupied a short time are assessed heavy charges for permits, besides which the payment in case of fire is reduced. Insurance companies claim that all is necessary, and that farm insurance does not pay them. But the farmer, bearing in mind on the one hand the large salaries and dividends paid by many of the companies, and on the other hand recalling the lower cost of Grange insurance and other mutual insurance enterprises, is somewhat inclined to doubt whether the tremendous advances and the annoying restrictions are required by the conditions. There is a suspicion, in fact, that the companies have combined to fix the terms to suit themselves and to tighten up the screws all the business will stand. The best hope of relief seems to lie in the growth of the co-operative insurance societies, which, through careful selection of risks and low cost of management, are able to offer a very wholesome competition.

The Men who Wear Cloaks.
Never place overconfidence in a man on account of his profession, and you will not be deceived. Burns said long ago: "Mankind is unweave and little to be trusted," and this saying has received a startling verification in the case of the defaulter Allen, who is now a fugitive from justice.

His integrity was unquestioned until his written confession was made, and it was shown that he had robbed the aged, the helpless and the orphan by stealing funds that were reserved for their benefit. He had all the outward appearance of a religious man, who loved his neighbor as himself, and yet he was corrupt to the heart's core. All without was as the marble smooth, but within he was morally rotten.

It is no excuse to say that he was made dishonest by stock speculations. What right had he to take money that did not belong to him in the hope of acquiring sudden riches? It is probable that at the beginning he believed he would be able to replace what he had taken, but he should never have made the first step that led to his wretched downfall. It is always the first dishonest act that comes. It inevitably leads up to further criminal proceedings, and the States prisoners are full of thieves who could not make good their stealings when a crisis came.

The sinner is always to be pitied. Even Allen is deserving of commiseration, when we think of the wretched life he has led for years, and which he must lead for the rest of his natural existence, though he may escape legal punishment. He carries about with him a hell of conscience, which is far more torturing than any imaginable penalty might be after death.

But is he alone to blame for the losses that must now be made up by subscriptions in order to help the poor and the superannuated? Why were not sufficient safeguards thrown around him to prevent his robberies? A heavy and sanctimonious manner does not betoken virtue any more than a light and merry one indicates immorality. The lesson to be learned from this pious person's wreck is that all men are weak, and those who are really upright will not object to any investigation of their methods. Supervision will not hurt them, and it will help to expose rascals, no matter what kind of cloaks they wear to conceal their deviltries.

Roosevelt on Lynching.
President Roosevelt's letter to Governor Durbin, commendatory of his firm attitude in regard to the matter of lynching, is a communication that is really addressed to every right-thinking and loyal citizen in the land. In it Mr. Roosevelt indicates unmistakably that there is no justification for appealing to lynch law in the case of negroes who have been accused of serious crimes against white women. The attempt of some papers to excuse the brutality of the lynchers on the ground of great provocation is an insult to civilized people. No apology should be made for a violation of the law by a mob that usurps the power of the courts, and sometimes inflicts death on innocent colored men on mere suspicion that they have committed criminal assaults.

The Baltimore Sun finds fault with the President's letter. It says he apologized for torture in the Philippines by American soldiers, because the Filipinos by their savage action goaded them into taking revenge. But what have the Philippines got to do with the lynching of negroes in the United States, anyway? Even if Mr. Roosevelt erred in regarding too lightly the offenses in the far-away archipelago which came into our possession unexpectedly, it does not prove that he is

wrong in condemning the lawless acts in America. He stands on firm ground in denouncing the men who put Judge Lynch in the place of the regular legal tribunals, and who send a poor ignorant wretch to his death without the consolation that has always been accorded the greatest criminals that have been lawfully sentenced to capital punishment after deliberate and impartial trial, and with all the protection that an able defense could throw about them.

Unfortunately, Mr. Roosevelt can offer no specific cure for lynching, for each State must furnish a remedy itself through the proper enforcement of the laws, which are usually sufficient for the protection of all, black and white, male and female. But while there are men in authority who have not the backbone of Governor Durbin, lynching will continue to be practiced, though his example, it is to be hoped, will lead to the creation of a public sentiment that will in time make lynchers objects of contempt and subjects for punishment in every orderly community in the United States which is now subject to much adverse criticism on account of the mobs that take human life without the slightest show of justice.

The governor of Indiana placed the rioters of Evansville just where they belonged. He met the question of their outrage squarely and fairly and did not smugly pass it by as a matter that would settle itself. There are, no doubt, many men in similar positions who would be equally loyal to the claims of humanity in a trying crisis; but, through cowardice, or a fear of local public opinion, there are, alas, others who would wash their hands of all responsibility, pursuing the wrong, while having a perfect knowledge of the right.

Forestry on a Famous Game Preserve.
Members of the family of the late Austin Corbin of New York have decided to practice forestry on the Blue Mountain Forest Park, near Newport, in Sullivan County, N. H., and have asked that a working plan for the management of the timber lands be prepared by the Bureau of Forestry. Alfred A. Kerman, an instructor in the Yale Forest School, with eight men, will be employed on the work during the summer.

The Blue Mountain Forest Park contains twenty-five thousand acres, and is stocked with a variety of wild animals, including what is said to be the largest herd of pure-bred buffalo in this country. There are 128 head of the animals. Besides buffalo, the park contains wild boar from Germany, elk, moose and deer of several kinds. The owners of the park wish it to be maintained first of all as a game preserve; but they are also anxious that the timber be put in the best condition possible, and for that reason have decided to manage it according to principles of forestry. The park was established twelve years ago by the late Austin Corbin, who purchased a number of adjoining farms, surrounding them with a fence, and stocked them with game. The long ridge of Crockett Mountain runs through the tract, and on this ridge grows a forest composed of spruce and hard woods. The spruce is now being lumbered under forest management. Old pastures in the tract, which are growing up to spruce, will be studied by Mr. Kerman and his party in order to devise ways of hastening the reforestation.

Another piece of forestry work in New Hampshire undertaken by the Bureau of Forestry this summer is a working plan for the management of three thousand acres of cut-over land on the southwest slope of Mt. Moosilauke, in Grafton County, owned by the Pike Manufacturing Company. The favorable market conditions there offer an opportunity to show what forestry can accomplish on land from which the large spruce and other soft woods have been removed. This work will be in charge of T. S. Woolsey, Jr., a recent graduate of the Yale Forest School.

The Theatre Licenses.

It appears that the Board of Aldermen have delayed some of the theatre licenses and that they can not be given now until Sept. 14. Their issue may be even postponed after that date, it is said, if some of the aldermen are not satisfied with the provisions made for giving them free tickets to dramatic entertainments. Possibly it is all right to issue a complimentary ticket to an alderman for his use alone, so that he may obtain a personal knowledge of the character of an entertainment farmed, but there is no reason why he should be supplied with unlimited passes for his sisters, his cousins and his aunts, and the cheap ward politicians who he favors. Yet this is the consideration he is accused sometimes of demanding at the hands of managers, and because he is refused this, he sulks like an Indian in his tent.

What a lack of dignity such behavior shows in a city father, if the stories told about him are true? It puts him on a par with the so-called grafters in other directions who make unjust demands. The theatres are for the benefit of the public, not for the use of the aldermen and their friends, and all that is really obstructive of reputable exhibitions is deserving of severe condemnation. Theatres are not run without great expense, and anything that takes money from them is detrimental to their success. Therefore, the alderman, who is well paid for his services by the city, should not exact from the proprietors of our playhouses any more than he would take from any other business man. Probably an alderman would not sell for

cash a ticket that he got for nothing, but is he above giving it to some follower for the purpose of securing his political support?

Secretary Root's Retirement.
For some time it has been known that Secretary Root intended to lay down the cares of his great office. He has been an efficient and hard working Secretary of War, and he deserves the rest that he craves from official duties, that were more or less ungenial to a man whose profession is the law, which only incidentally has to do with the place that he has filled so ably for four years in trying periods of change and peril.

He had to face situations that were entirely novel to this republic, which for years was not a colonizing power, and he has acquitted himself with great satisfaction to the majority of his countrymen. He has not been faultless, but he has certainly endeavored to do his duty as he saw it with thorough impartiality. His army reforms will do fifty square miles take their place to Mr. Root will be found in the person of Governor Taft or some one else of equal ability and experience.

Cost of Bad Roads.
The infliction of poor roads is a burden in more than one way. It prevents farm property from rising in value. It shuts the farmer away from the markets and other city advantages at certain times of the year. It interferes with pleasure travel, the mail service, and it tends to keep away the best classes of visitors and intending residents.

These losses are hard to get at closely in dollars and cents, but the effect of poor roads on cost of hauling farm produce may be estimated more directly. In his address at the Kentucky Commercial Convention, G. A. Dunham reckons on the basis of a road ten miles long, over which the farmers of fifty square miles take their produce to the town and shipping station.

Counting four farms to the square mile, such a territory would embrace two hundred farms of 160 acres each. In some sections there would be smaller farms and more of them. The average distance traveled by each of these farmers in going from home to the railroad station and return, many of them living two or three miles at either side of the supposed main road, would certainly not fall under 124 miles. An average of two-round trips per day would give twenty-five miles as day's journey, which is certainly more than a loaded team can perform over a bad road.

"Let us suppose," said Mr. Dunham, "that the farmers of this territory will produce a surplus for market, averaging each farmer to have one hundred bushels of wheat, fifty barrels of corn, five tons of hay and five tons of miscellaneous products. Counting that the average team can draw over the average bad roads loads of two thousand pounds, we will find that this territory will produce for market 1800 wagon loads of wheat, 1750 wagon loads of corn, one thousand wagon loads of hay, one thousand wagon loads of miscellaneous products, making in all 4900 wagon loads. Then, if it is possible to make two round trips per day as an average for this territory, it will require a driver with a span of horses and a wagon, 2475 days to move these surplus products to the railroad station. Counting the cost of the driver, wagon and team at \$2.50 per day, the cost of transporting these products will amount in the aggregate to \$6187.50."

"It is a well-known fact that a team can draw twice as much freight over a good road as the same team can draw over a bad road. If this be true, and this same road should be made into good road, with easy grades, with smooth, hard surface, this same work could be done for just one-half or for \$3063.75. Just think of it! A joint stock community paying out more than \$3000 per year for the luxury of bad roads; an annual loss on each of them of more than \$15. In four years this annual tax would pay for building ten miles of good roads."

This estimate may be placing the direct cost a little too high. In actual practice double loads would not be carried on good roads. More usually loads one-third to one-half greater would be carried, and part of the saving would be in wear and tear of the hauling equipment and in the peace and comfort of the owner. But there are times also when speed is extremely valuable and the ability to make a quick trip to town at almost any time of year is a feature of the improvement much appreciated by farmers. While the precise way in which each one of the two hundred or more farmers had saved his \$15 might not be so evident as Mr. Dunham's figuring would indicate, yet it is safe to say that very few of those benefited by the road would be willing to go back to the old steep, rocky, mucky road on payment of the sum mentioned. Good roads are more than mere profit makers; they are also a modern improvement, one of the agencies which are bringing to the farmers the best general advantages the world affords. Such values cannot be reckoned wholly in dollars, but experience shows that the values exist.

The Future of Porto Rico.

In alluding to the hurricane in Jamaica the New York Tribune says it is not calculated to cause any such complete prostration as would a similar disaster where the people had only one economic resource. Our esteemed contemporary points out that in the old days sugar was about the only large product of the island, but when the price for that staple was reduced, the plant-

ers wisely decided to give a diversity to their crops, and they succeeded in producing the Blue Mountain coffee, which is sold exclusively in England, where it is highly esteemed. Of late years there has been more coffee cultivated than sugar-cane, and bananas have been more widely grown than either, to say nothing of the immense quantities of oranges and pineapples that are gathered for export.

The wholesale destruction of the banana trees in the recent wind disaster was a great misfortune that will be severely felt, especially by the United Fruit Company of Boston, which has been so largely instrumental in increasing the prosperity of Jamaica. The supply of tropical fruit is likely to run short in New York, Boston and Philadelphia and in other cities that rely on the markets in these ports. On this account it is supposed that the Porto Ricans will take advantage of this situation to make their fruit industry more valuable. Porto Rico is as well adapted to the cultivation of oranges and bananas as is Jamaica, and on both islands oranges grow wild. It is thought that it will take eleven months to bring banana cuttings to fruit in Jamaica, and it is said that this will afford Porto Rico an opportunity to perfect its crops and push its fruit trade to meet the demand that cannot be met by Jamaica.

If the chance is improved, as it should be, by business-like methods in shipping, the permanent prosperity of Porto Rico will be assured. It has already greatly improved in tobacco culture, and the products from this source are in increased demand, owing to the deterioration of many old brands of Cuban tobacco. Altogether, it seems as if our new possession would prove a more valuable acquisition than pessimistic observers have supposed.

A Chat on Dehorning.

At the recent field meeting in Rutland, Mass., several prominent cattle owners were discussing the subject of dehorning somewhat as follows:

Dr. W. H. Way—I would rather see their horns off. It prevents serious injury from fighting.

E. A. Hersey—It depends somewhat on disposition. Some cows do no harm with horns on. Others are great bunters even when dehorned.

B. W. Potter—I left the horns on because the cattle look better. But the children and hired men have had several narrow escapes from quarrelsome bulls.

C. E. Parker—I admit I haven't nerve enough to dehorn my herd, but I should like to see the horns off.

A. Derby—It is a simple matter and takes but a few seconds. The animal is tied to the barnyard fence with a rope. His head is pulled around to one side with another rope. Two men handle the dehorner, which has four blades closing upon the horn from all sides, and the horn comes off in a moment. If it bleeds much from the stumps I stop it by drawing a rope tight around the base of the horns.

E. A. Hersey—I use a kind of stall prepared for the purpose, confining the animal more closely. The dehorner is of the shears pattern and one man can use it. Usually the bleeding does no harm, but it can be stopped with a rope as described. The operation does no harm and does not cause shrinkage in milk. I cut off close to the head, removing a rim of hair. But I prefer to stop growth of horns with caustic potash applied when 'calves' horns are starting.

Rhode Island Fruit Notes.

The horticultural department of the State experiment station is carrying out what bids fair to be very valuable research in the studies of the apple maggot. The larvae of this insect have been one of the most serious pests to the apple industry in this State for some years. Much difference of opinion has existed among growers as to the difference in tilled and untitled land in keeping the maggot in check. The chief argument of those who favored the theory, that the maggot was less frequently found in cultivated soil was that the plowing buried the pupae so deeply that they could not reach the surface. The experiment station to test both theories has buried the pupa at different depths down to six inches below the surface, and then covered these areas with screens so that the exact number that hatch under the different conditions might be counted. The same experiment is being tried in both tilled and soil land. So far this season neither the difference in the number that appear above the ground, nor in past years the attempt to propagate huckleberries by root grafting and stem cuttings has been anything but satisfactory. This year much better success has been attained by mixing some soil taken from the native haunts of the huckleberry with that of the cutting bench soil. This delicious fruit is always in great demand at high prices, and any work which tends to make its propagation, under cultivation easier, cannot help but be of great value to the fruit interests.

As the season advances, many more interesting things are brought out by the experimental plots. About fifty different varieties of soy beans are being tested. From present indications, those grown from home-grown seed bid fair to give a much better crop than seed imported from other places. Soy beans and cow-peas were planted side by side on the same day. If we were to judge from the standpoint of a farmer crop at present, it would not be far out of the way to score soy beans at one hundred per cent., and the cow-peas not over eight per cent., or ten per cent. out of a possible one hundred per cent. The growth of the two so far at this place has been so vastly different, and so much in favor of the soy bean, that it seems to be almost conclusive that in the latitude of Rhode Island or farther north, the soy bean is much the superior crop of the two.

Mineral Waters of New York State.

The mineral waters of New York State have been known and employed as remedial agents for more than a hundred years, and there is evidence that the red men knew and had recourse at times to these healing waters at least two centuries ago. Sanitariums have been built and pleasure resorts have been developed at many of the natural springs. During the last quarter of a century the bottling of these waters and their shipment to all parts of the country has so increased that at the present time the annual proceeds of the sale of natural mineral waters found within the State of New York amount to more than a million dollars.

The Parliament's Good Work.

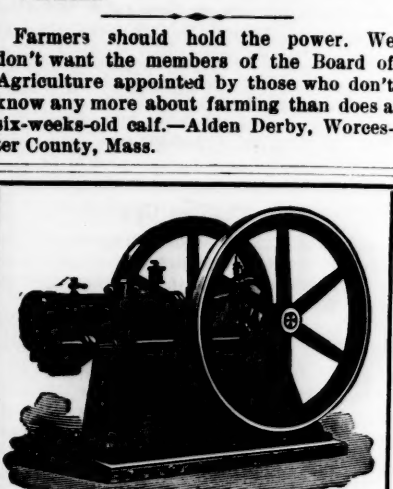
The British Parliament has ended its session. The most important measure passed by it was the Irish land act, which insures prosperity to the now tenant farmers by furnishing them with the means to become the purchasers of the ground they till. In his speech King Edward referred to this bill as likely to offer inducements to the present land owners to continue to reside among their countrymen, while the reform would conduce to the general benefit of all the Irish people. It will probably, though, do away in a great degree with the sporting aristocracy who looked upon Ireland as hunting territory, where the rights of the tenants need not be considered in the eagerness of the chase. Many a little cottage in the old times was unroofed by dogs in the pursuit of flying hares, who sought in the thatch a hiding-place from the coursers.

Grading Honey for Market.
In preparing honey for marketing, whether for home or abroad, it is always wise to remember that a neat, trim package finds the readiest sale. The one-pound section is, of course, the standard size nowadays, as consumers want an amount that they can purchase for twenty-five cents or less. We have seen honey exhibited in country stores with the sections just as they left the hives; propolis and all. We were not surprised to find the grocer paid eleven or twelve cents for it, when honey that was no better quality, but cleaned and put up attractively, was wholesaling for sixteen to eighteen cents.

Honey should be carefully graded. That which is of extra nice appearance being white and perfectly filled and sealed, may be marked "Fancy." Next is No. 1 grade, being good, white comb, but the sections not being quite as perfectly filled out as the fancy grade. Honey that is a little dark is No. 2, while dark honey, such as buckwheat or that which was discolored by golden-rod or kale, etc., is marked No. 3. Should there be any that was gathered from so-called "honey dew," it is to be kept by itself.

HILAS D. DAVIS.

Farmers should hold the power. We don't want the members of the Board of Agriculture appointed by those who don't know any more about farming than does six-weeks-old calf.—Alden Derby, Worcester County, Mass.



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is acknowledged to be reliable, all not so are dear at any price. Reliability is the only test of cheapness. Write for our special offer No. 7. It is liable to save you money. We are the largest water supply house.

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CHARLES J. JAGER CO.,
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Wanted at Harris Farm, North Scituate, R. I.
Two single men to work in dairy, one to assist manager. Americans preferred. Should be milkers with good habits. Accommodations are first-class, also liberal wages are paid to worthy men.

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The best, cheapest and most lasting fertilizer in the world. Now is the time to plow up your old meadows and re-seed them using wood ashes as a fertilizer. Write for prices delivered at your depot and address

JOHN JOYNT,
Lusknow, Ontario, Canada.
Reference—Dominion Bank, Wingham, Ont.



Yorkshire Swine Pigs

For store and breeding purposes by
W. W. RAWSON,
ARLINGTON, MASS. and NEWTON, N. H.

AN ABUNDANT WATER SUPPLY

can be had and plenty of money made by using our Well Machinery!
LOOMIS MACHINE CO., TIFFIN, OHIO.

The Markets.

BOSTON LIVE STOCK MARKETS.

ARRIVALS OF LIVE STOCK AT WATERTOWN AND BRIGHTON.
For the week ending Aug. 26, 1903.

	Shotes	Fat	
Cattle	1,200	8,475	75
Sheep	1,200	9,365	82
Hogs	1,200	10,455	90
			20,287
			2,540

Prices on Northern Cattle.

BEER—Per hundred pounds on total weight of hide, tallow and meat, extra, \$4.00; first quality, \$3.50; second quality, \$3.00; third quality, \$2.50; fourth quality, \$2.00; fifth quality, \$1.50; sixth quality, \$1.00; seventh quality, \$0.50; eighth quality, \$0.25; ninth quality, \$0.10; tenth quality, \$0.05.

FAT HOGS—Per pound, Western, \$0.10; Live weight, \$0.10; dressed, \$0.10; retail, \$0.10.

CATTLE—Per head, \$1.00; Live weight, \$1.00; dressed, \$1.00; retail, \$1.00.

SHEEP—Per head, \$1.00; Live weight, \$1.00; dressed, \$1.00; retail, \$1.00.

HIDES—Brighton—\$1.00; Country lots, \$1.00.

TALLOW—Brighton, \$1.00; Country lots, \$1.00.

FATS—\$1.00.

CATTLE, SHEEP, CATTLE, SHEEP.

At Brighton, At Watertown.

F. L. Howe, J. S. Henry, J. S. Henry, J. S. Henry.

J. M. Phillips, J. M. Phillips, J. M. Phillips, J. M. Phillips.

H. M. Howe, H. M. Howe, H. M. Howe, H. M. Howe.

J. S. Henry, J. S. Henry, J. S. Henry, J. S. Henry.

J. M. Phillips, J. M. Phillips, J. M. Phillips, J. M. Phillips.

H. M. Howe, H. M. Howe, H. M. Howe, H. M. Howe.

J. S. Henry, J. S. Henry, J. S. Henry, J. S. Henry.

J. M. Phillips, J. M. Phillips, J. M. Phillips, J. M. Phillips.

H. M. Howe, H. M. Howe, H. M. Howe, H. M. Howe.

J. S. Henry, J. S. Henry, J. S. Henry, J. S. Henry.

J. M. Phillips, J. M. Phillips, J. M. Phillips, J. M. Phillips.

H. M. Howe, H. M. Howe, H. M. Howe, H. M. Howe.

J. S. Henry, J. S. Henry, J. S. Henry, J. S. Henry.

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2 cows at \$45 each; 1 choice cow, \$50; 2 common cows, \$35.50 each. A. C. Foss sold 3 choice cows, \$40, \$35 and \$30; 1 at \$45.

Veal calves.

Butchers were anxious to have it understood that prices on calves were 10c, at the least, lower, but on some lots it could not be seen in that light. J. P. Day sold 45 calves, 100 lbs. at 10c. F. L. Howe sold 30 calves, 100 lbs. at 10c. Thompson & Hanson, 90 calves, at 10c. Farmington Live Stock Company, 130 calves, assorted, at 10c.

Late Arrivals.

Wednesday—The movement in beef cows was very quiet. Some from nearby towns of taking their cattle back home. Bids were not satisfactory, but as arrivals were not heavy, they made a start later in the day at a fair range. Milk cows are in fair demand at steady prices. H. M. Lowe had the best on the market, selling a trifle better than \$70, and sold other cows at \$55.40. The Libby Company sold springers, \$30.40, and best springers, \$40, and sales down to \$30. M. G. Flanders sold 15 milk cows at \$35.50. J. S. Henry sold some of his finest cows at \$40, some at \$35, down to \$35. O. H. Forbush, 1200-lb. cow, at \$35. A. Wheeler sold a 1000-lb. cow at \$35. W. Cullen sold 16 choice cows, at \$40.

Store Figs.

A light run and quiet sales. Buckers, \$2.50; shotes, \$2.00.

BOSTON PRODUCE MARKET.

Wholesale Prices.

Poultry, Fresh Killed.

Northern and Eastern—Broilers, 6 to 10 lbs. to pair, \$1.00; 10 to 12 lbs. to pair, \$1.10; 12 to 14 lbs. to pair, \$1.20; 14 to 16 lbs. to pair, \$1.30; 16 to 18 lbs. to pair, \$1.40; 18 to 20 lbs. to pair, \$1.50; 20 to 22 lbs. to pair, \$1.60; 22 to 24 lbs. to pair, \$1.70; 24 to 26 lbs. to pair, \$1.80; 26 to 28 lbs. to pair, \$1.90; 28 to 30 lbs. to pair, \$2.00; 30 to 32 lbs. to pair, \$2.10; 32 to 34 lbs. to pair, \$2.20; 34 to 36 lbs. to pair, \$2.30; 36 to 38 lbs. to pair, \$2.40; 38 to 40 lbs. to pair, \$2.50; 40 to 42 lbs. to pair, \$2.60; 42 to 44 lbs. to pair, \$2.70; 44 to 46 lbs. to pair, \$2.80; 46 to 48 lbs. to pair, \$2.90; 48 to 50 lbs. to pair, \$3.00; 50 to 52 lbs. to pair, \$3.10; 52 to 54 lbs. to pair, \$3.20; 54 to 56 lbs. to pair, \$3.30; 56 to 58 lbs. to pair, \$3.40; 58 to 60 lbs. to pair, \$3.50; 60 to 62 lbs. to pair, \$3.60; 62 to 64 lbs. to pair, \$3.70; 64 to 66 lbs. to pair, \$3.80; 66 to 68 lbs. to pair, \$3.90; 68 to 70 lbs. to pair, \$4.00; 70 to 72 lbs. to pair, \$4.10; 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Our Homes.

Summer Pillows.

One cannot have too many cushions. They add much to the furnishing of a room—on the lawn, for wicker chairs or the hammock, the steps and the swing.

Those with washable covers are most favored for summer use. Handkerchief cushions are quite a fad now, and bordered handkerchiefs are manufactured especially for that purpose. Some are made of two large handkerchiefs stitched together with a fringe of colored lawn or chambray to match the colors in the border of the handkerchief. Another pretty way is to cut the handkerchief in four pieces, lay them in a square, so the borders come in the center. These four pieces are joined together with beading, through a colored ribbon is run. A ruffle of lawn, dotted Swiss or embroidery finishes the edge.

Checked gingham is a favorite material for summer pillow cases. Some are made up plain with a ruffle, but often a design in cross stitch in white cotton is worked out on the squares. Linen crash makes cool and serviceable pillow cases and is quite showy in drawn work over colors. The threads being coarse, the work is very rapid and effective.

The fine Panama netting makes cool and inexpensive summer pillows. Remnants can be bought very cheap. Two pieces are cut about twenty inches square and joined together with a binding of braid sewn on by machine over a pillow of muslin filled with moss or curled hair.

Denim still holds its own. White mercerized cotton is pretty work. Large interlaced circles worked in feather stitch over denim make a nice cover. Grass cloth makes cool covers. A design of hops worked in silver green is effective. Encase hops in a cloth cushion, then put the cover on. The down which comes off of cat-o-nine-tails makes a good pillow filling.

EVA M. NILES.

Ways of Cooking Eggs.

It may sound somewhat odd to speak of the "season" of eggs, since they are in evidence all the year round, but assuredly they have their season, in common with all other animal and vegetable products. When eggs are cheapest and most plentiful, they are also most wholesome. A housewife is wise to seek for as many ways of using them as she possibly can. Most people take an egg for breakfast, but a new way of poaching one for an invalid's tray is to butter the inside of a cup, separate the white from the yolk of a new-laid egg, drop the white into the cup, and stir it with a spoon into the cup, making a cavity in the middle wherein to slip carefully the yolk. Squeeze a drop or two of lemon juice on the top, then set the cup in a small saucepan of boiling water, and let it poach until the white is set firm. In the cooking the milk will rise so as nearly to fill the cup. Invert a plate over the cup and turn out the egg, sprinkle a pinch of chopped parsley on the top; serve at once.

Another equally delicate mode of making a sweet dish for dessert is to poach the whisked whites in sweetened milk by dropping small spoonfuls in when it is near the boiling point. When all the whites have been poached and lifted out, the beaten yolks are added to the milk and stirred over the fire until a thickened custard is obtained; this can be flavored according to taste. Pour the custard into a compote dish, and set the poached whites on the top. Boil till hard three or four eggs; throw immediately into cold water to prevent discoloration, then strip off the shells. The eggs in halves, and cut off the points so that they will stand firmly on a dish; remove the yolks from each half, and to them add a spoonful of white bread crumbs soaked in milk, the same amount of soft butter, some chives and sweet herbs minced, also salt and pepper, or, instead of pepper, a few drops of tabasco or tomato ointment will be an improvement. Mix these ingredients and then re-fill the eggs. Butter a fireproof china dish, sprinkle the bottom with fine herbs and crumbs, set the eggs thereupon and heat in a quick oven for just five minutes.

A puree is cooked separately by stewing well washed and poked sorrel in a little butter until it is so reduced that it can be beaten with a wooden spoon. Season this well with salt and pepper, and beat in a couple of spoonfuls of thick cream. The eggs are in the meantime baked in buttered cups, and when just set they are dropped into the puree, a sprinkling of finely minced fresh onion on the top of each. This dish also should be served hot as soon as cooked. It goes without saying that eggs baked in this way might be served on any other kind of puree, or surrounded with stewed fresh peas; or a savory brown sauce might be substituted for the vegetable.

Another favorite dish of baked eggs is also easily prepared. Butter the bottom of a shallow earthen dish or a pie dish; sprinkle in first a few bread crumbs; break into this as many eggs as the dish will reasonably hold without their running into one another, cover these thickly with grated cheese, a sprinkling of salt and pepper, pour in the greater part of a small jugful of cream and add one or two bits of salt butter. Set this dish in a moderate oven to brown the surface slightly and cook the eggs, then serve at once.—N. Y. Tribune.

Unfermented Grape Juice.

Unfermented grape juice has valuable medicinal qualities, which have resulted in the establishment of so-called grape cures in European wine-producing districts to which physicians send debilitated patients during the season. The Department of Agriculture is endeavoring to have Americans who have vineyards take up the manufacture of unfermented grape juice, and the Government has just issued a bulletin giving directions for the treatment of the grapes. George C. Husmann is the author of the pamphlet, and his directions are so plain that any housewife can make unfermented grape juice for a family with very little trouble.

All that is needed is that clean, sound grapes, well ripened, but not overripe, shall be crushed and pressed, either in a small cider press or by hand. To press the fruit by hand, the crushed fruit should be put in a cloth sack and squeezed. Then the juice should be heated in a double boiler, so that it shall not come in contact with the fire, to a temperature of 195° F. The juice should never be heated above 200°. This heating prevents fermentation, and makes it possible to keep the juice for long periods.

After heating the juice should be allowed to settle in clean vessels, and then the clear liquid drained off into the bottles in which it is to be kept. The bottles should be heated to about an inch of the neck and then placed on a false bottom in a water boiler, with water up to an inch of their mouths.

The water should be brought to a simmer. Then the bottles should be taken out, corked with corks that have been boiled in

water of 240° F., sealed with wax and set aside in a cool place to be used as wanted.

If the sterilization is at too high a temperature, or the grape juice is not filtered, the final product will be cloudy and may taste a little off.

Those who may wish to make unfermented grape juice in larger quantities will find the yeast by burning sulphur matches, made of strips of linen soaked in melted brimstone, in a clean oak until they will not burn in it, filling the oak with the full of grape juice, agitating and repeating the process until the oak is full, but they must be careful or the juice will taste of the hereafter.

Uncle Sam's experts say that grape juice is a good food. Here are some recipes they recommend to a temperance nation:

Grape Nectar.—Take the juice of two lemons and one orange, one pint of grape juice, one small cup of sugar and a pint of water. Serve ice cold. If served from punch bowl, sliced lemon and orange add to the appearance.

An Invalid Drink.—Put in the bottom of a wineglass two tablespoonfuls of grape juice; add to this the beaten white of one egg and a little chopped ice; sprinkle sugar over the top and serve. This is often served in sanitariums.

Grape Punch.—Boil together one pound of sugar and half a pint of water until it spins a thread; take from the fire and when cool add the juice of six lemons and a quart of grape juice. Stand aside over night. Serve with plain water, apollinaris or soda water.

Grape Sherbet.—For eight persons mix one pint of grape juice (unfermented), juice of lemon, and one heaping tablespoonful of gelatine, dissolved in boiling water; freeze quickly; add beaten white of one egg just before finishing.

Grape Ice Cream.—One quart of unfermented grape juice, one quart of cream, one pound of sugar and the juice of one lemon.

Syllabub.—One quart of fresh cream, whites of four eggs, one glass of grape juice, two small cups of powdered sugar; whip half the sugar with the cream, the balance with the eggs; mix well; add grape juice and pour over sweetened strawberries and pineapples, or oranges and bananas. Serve cold.

Bohemian Cream.—One pint thick cream, one pint grape-juice jelly; stir together; put in cups and set on ice. Serve with lady fingers.

Besides the recipes just given many more are enumerated, such as grape ice, grape lemonade, grape water ice, grape juice and egg, baked bananas, snow pudding, freeze gelatine, junket and grape jelly, tutti-frutti jelly, grape float, grape jelly, grape juice plain, and grape soda water.

A Hygienic Bedroom.

Every bedroom should be provided with the essentials for healthful sleep and the daily sponge bath.

As nearly as possible the room should be kept free from anything that would tend to contaminate the air.

It should be as large as one can afford, and the windows so arranged that they may be opened at the top and bottom.

If possible, the floor should be bare, and the rugs so small that they can be taken out of doors with ease for cleaning and airing.

Everything about the room should be washable.

The bed should be light, and fitted with strong castors, so that it may be readily moved.

The springs ought to be firm and strong, and the mattress of a kind that will not allow the heaviest part of the body to sink, and so cause the sleeper to lie in a cramped position.

Many people prefer a cheap, hard mattress next the spring, and a light one of hair on this; but any kind of a mattress is better than one that is too soft.

Above all, do not overfurnish the bedroom.—Chicago Journal.

Much Virtue in an Onion.

The idea of an onion cure may not strike the fancy of the aesthetes; however, the experience of those who have tried it is that it works wonders in restoring an old-racked system to its normal state again. There are three kinds of doses in the onion cure, or three onion cures, as you may choose to put it. One is a diet of onions, the other is onion plasters, and the third is onion syrup.

It is claimed by those who believe in the onion cure that a bad cold can be broken up by a liberal diet of onions. It need not be an exclusive diet, but a liberal one. For instance, an onion-cure breakfast includes a poached egg on toast, three spoonfuls of fried onion and a cup of coffee. Luncheon of sandwiches, made of Boston brown bread, buttered and filled with finely chopped raw onions, seasoned with salt and pepper, makes the second meal on the schedule. For supper, the onions may be fried as for breakfast and eaten with a chop and a baked potato.

The strange efficacy of onions is well known to the singers of Italy and Spain, who eat them every day to improve the quality of their voices and keep them smooth. Onion plasters are prescribed to break up hard coughs. They are made of fried onions placed between two pieces of old muslin. The plaster is kept quite hot until the patient is snugly in bed, when it is placed on the chest to stay over night. Onion syrup is a dose that can be bought of any druggist and is claimed by some to be unequalled as a cure for a cold in the chest.

All this is probably quite true. For to be done up with onions, both inside and out, would be enough certainly to chase out any self-respecting cold.—Table Talk.

Expanding Baby's Lungs.

"A mother should not let a little crying on the part of her baby disturb her," writes Mariana Wheeler, for twelve years superintendent of the New York Babies' Hospital, in a little handbook called "Plain Hints for Busy Mothers." "Crying," she continues, "is the only method the child has of exercising his lungs. He does not breathe deeply enough in early infancy to fill the lungs, but by an occasional good scream and once in a while holding the breath, he gradually expands and strengthens his breathing apparatus. I would not advise a mother to let her baby cry by the hour, but if he should without apparent cause cry violently, look over his clothing carefully to see that there are no wrinkles or pins disturbing him, that he is dry and hands and feet are warm; then, if there seems no reason for his crying or if he stops as soon as picked up, put him down and let him cry it out."

"The brightest children," says this sensible author elsewhere, "are those who are left for the most part to think out their own play and amusement. A mother can readily train her baby to be very little crier, first by not handling him often and second by feeding him with absolute regularity. The 'goodness' of a baby depends almost entirely upon the mother."

"It is a great mistake to put too much

clothing on an infant. It is not the quantity but the quality and the way it is distributed that determine the warmth. Numerous clothes cause wrinkles, which cause and injure the tender flesh. Nothing strengthens the muscles of a child so much as exercise, but held down by heavy clothes the baby simply cannot use his legs."

The Habit of Not Feeling Well.

Few people realize that their ailments are largely self-induced. They get into a habit of not feeling well. If they get up in the morning with a slight headache or some other trifling indisposition, instead of trying to rise above this condition, they take a positive pleasure in expatiating upon their feelings to any one who will listen. Instead of combating the tendency to illness by filling the lungs with pure fresh air, they dose themselves with "headache tablets" or some other patent specific warranted to cure whatever ill they think they are suffering from. They begin to pity themselves, and try to attract pity and sympathy from others. Unconsciously, by dwelling and dwelling upon their symptoms, they re-enforce the first simple suggestions of illness by a whole army of thoughts and fears and images of disease, until they are unfitted to do a day's work in their homes or offices.

It is said that man is a lazy animal. We are all more or less prone to indolence, and it is the easiest and most natural thing in the world for young people to accustom themselves to lying down on a lounge, on a sofa, or in a hammock, and there they stay, or not much. Much so-called invalidism is simply laziness, fostered and indulged from childhood. There is a great danger that girls who are delicate while growing up, and lounge around the house and lie down whenever they feel the least bit out of sorts, will form a habit of invalidism when they reach maturity. How often do we see such girls "brace up" at once when ever anything happens which interests or amuses them, and then, when they are invited to a ball, or any other pleasant social function, act like a tonic. For the time being an instantaneous cure is effected. They are as well as anybody until after the entertainment.—Success.

The Yawn.

Have you ever thought about a yawn? What causes it, what it protests against, what effect it has upon the system?

The yawn is an ingenious little form of exercise of Mother Nature's own devising. It is Nature's own protest against lazy blood, which is not circulating as it should, and against a sluggish system in general.

Look a little closely into it and you will find that human beings do not yawn only when sleepy or bored, as is generally supposed, but when cold or bilious as well.

Chilliness and indigestion produce the same sluggish condition of the blood as drowsiness does, and consequently awaken the same disposition to yawn.

Let the reader who makes an ocean trip the next time look out for yawns on deck more chills. He will find that the passengers whose shawls are not wrapped closely around his limbs while he is seated yawning incessantly.

It is not an indication of sleepiness, but of stagnation caused by the cold.

Dyspepsia is another, and very common, cause of yawning.

To understand just how nature exercises the system by this simple little gymnastic move, think about it the next time you find yourself yawning, and analyze the sensations.

You will discover that stretching, loosening, expanding, mild as it is, extends to every part of the body. The tingling of it can even be felt in the toes.

In the entire region of the head we can actually see the physical culture in progress by standing in front of a mirror. The jaw drops, the cheeks are drawn down, the mouth is opened, the tongue is thrust out, and the tongue and throat are affected as well as the entire neck.

The same relaxation that stimulates lungs and chest is felt a moment later in the abdomen. It requires no stretch of the imagination to feel it subsequently in limbs and feet. Every portion of the body is reached and roused.

Take the growing tendency to yawn as a warning of the danger of the cold, and the danger of indigestion. Warnings are almost invariably the principal danger. A beautiful model in blue satin straw is merely a flat plaque folded into shape, and mounted on a brown lace foundation. Two brown velvet ribbons are laid over the top of the lace, and the other trimming consists of two large wings in shaded brown tones, relieved with touches of white.

An all-white toque of soft straw has a facing of white crepe de chine, and has the top almost covered with doves' wings. Another has a lining of black velvet, and the wings shade into gray and brown.

A striking model in green and blue satin saw the braids fitted in such a manner that each scallop seems to be tipped with a point of bright blue. The only decorations are two bright blue quills thrust through the straw near the front.

The sailor shape promises to be popular for youthful wearers. One of these has a rolling brim and a folded crown, and is made of brown and white straw, irregularly mingled in a sort of plaid. Folds of brown velvet and two hand-some white wings finish the crown.

The first autumn importations are being shown in the shops, and from them one may obtain a general idea of the changes that the season will inaugurate. In the first place, it seems likely that the entire costume for autumn wear will be much more tight fitting than that of the year ago. The blouse front and the bolero are not seen at all, being succeeded by fitted waists and very long coats. These, it is said, will require a corset rather higher than the one now being worn, and the figure as a whole will assume a more conventional outline.

So-called mannish materials will be much affected. Tweeds, serges and other rough cloths lead in popularity, and plaid effects promise to be prominent. Grays, browns, greens and several shades of purple will be fashionable colors. The last-named being reserved for more elaborate gowns. Brown will probably be seen on the street more than any other color. There are so many shades of brown that all types of women will be able to find suitable brown. Sun and rain are usually fatal to it, no matter how expensive the material may be.

A model walking suit, unpacked not more than a day, was seen. It was a warm shade of gray, with a neck of white lace, and a skirt of green. The forty-two-inch coat was arranged in flat plaits in the back, the plaits starting from the shoulders and almost meeting in a point at the waist. A laced belt marked the waist line. The front of the coat was plaited in straight, flat folds and was buttoned not more than three inches below the belt. The skirt which escaped the ground, was also plaited and pressed very flat.

Shaded effects appear in everything—hats, feathers, ribbons, velvets. One sees long white plumes flecked with black, pale blue, or pink feathers shading into purple, while few feathers bear the same shade throughout. The shades of purple are not so startling as combinations of materials. Chiffon and muffs and bonnets, and its vogue will not soon decline.

Break eight eggs in a bowl; add to them six tablespoonfuls of sugar, a quart of milk, a tablespoonful of vanilla, and a sherry glass of brandy. Mix well together, strain, and bake in a slow oven for about forty minutes, having it well colored on top. Serve ice cold.

BAKED CUSTARD.

Break eight eggs in a bowl; add to them six

PRETTY FRUITS.

Serve as dessert fruit, large peaches, one of each person, laid upon a vine leaf in the middle of a glass plate and surrounded by a fruit knife, fruit napkin and glass napkin containing cherry syrup. The peaches are to be pared, cut in delicate long slices, and either dipped into the syrup as eaten, or dropped in together, and eaten after. To make the cherry syrup, put a pound of best lump sugar and one dozen of kernels in a glass jar, cover an inch deep with good sherry and set in the sun, stirring occasionally until the sugar dissolves.

CHICKEN AND MUSHROOM SALAD.

Put the chicken into dice-shaped bits and cut the mushrooms into quarters, if they be large; fry them very lightly a bit in butter, then moisten with a chicken stock, cover tightly and let cook till tender. Take up, drain and set away to cool. There should be about half the quantity of mushroom to that of chicken, unless you prefer very rich. Put the chicken and mushrooms on lettuce leaves, cover with mayonnaise and serve.—The Epicure.

Hints to Housekeepers.

To be comfortable when traveling is all a matter of knowing how, says the modern Frisellia. If a woman is going on a long journey she should have a suitcase, or hand-trunk, which, thanks to the ever present porter, can be always at her side. It is a change of linen, a few separate waists, herewith to smarten up at the hotel, with plenty of neckwear, gloves, etc., and at the hotel with easy reach, a dressing sack or bathrobe and bedroom slippers for use in the morning. One can easily carry in this trunk enough to be comfortable for a week or two with no care about trunks or the need of them. In the grip an astonishing number of things may be stored away. Besides the ordinary toilet articles there may be a small box for powder and hair, a tin of shaving cream, a small box of pins, a diminutive sewing companion, a small white broom, a medicine glass, a vinaigrette, nail file, button-hole, scissors, hairpins, court-plaster, a brandy glass and various other small vials. Thus equipped the traveler can emerge at intervals from her room refreshed and shining and fill with envy the souls of her travel-worn and benighted companions.

No one in these days thinks of papering or whitewashing a room, with the result that oil-painting in a flat that is, without repair, or a ball, or any other pleasant social function, acts like a tonic. For the time being an instantaneous cure is effected. They are as well as anybody until after the entertainment.—Success.

For blackberry vinegar put fresh blackberries in a jar and cover them with cider vinegar, allowing one quart of the vinegar to two quarts of the berries. Cover and let stand for forty-eight hours. Then strain the liquid, keeping the berries whole, and pour over one quart of fresh water. Boil for ten minutes, stirring occasionally with a fork, pour into a colander, and strain the liquid into a bottle. The vinegar is now reserved to a golden brown. Heap the boiled berries in a vegetable dish, and drop the fried ones lightly over the surface. Serve the fish with a cream sauce.

Ice-cream with hot chocolate sauce is considered a dessert by excellence by many. For the sauce melt one ounce of unsweetened chocolate in half a cup of hot water, add one cup of sugar, and when it boils pour it over half a cup of cream, plain or whipped. Serve at once, pouring the sauce around the ice-cream, not over it.

Over in London they are actually wearing the long, dangle-dangle earrings that have been threatened for years. Their revival was almost inevitable, in view of the "droopy" fashions that have been so popular. The new earrings are being worn, English women are finding out that they are not so unbecoming as they have been supposed to be. It may be said in defence of the long earrings now worn that they are more artistic in design and rather less ridiculous than the ears of half a century ago.

One great trouble with apple jelly is its frequent insipidity. To obviate this, try flavoring the hot jelly mixture with rose geranium leaves, or with the juice of fresh pineapple.

Fashion Notes.

The new hats are nearly all toque shaped, the predicted high crowned picture hat not having appeared as yet. Most of the importers doubt their appearance at all, they having met with small approval in European fashion centers. The new styles are slung in the design, but they are not so radical as they seem. Wings are almost invariably the principal decoration. A beautiful model in blue satin straw is merely a flat plaque folded into shape, and mounted on a brown lace foundation. Two brown velvet ribbons are laid over the top of the lace, and the other trimming consists of two large wings in shaded brown tones, relieved with touches of white.

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For has recently been introduced in combination with feathers and chiffon as well as lace.

Wood-silk laces are among the novelties of the hour. They are used for all kinds of trimmings, purposes and for neckwear, and their attractiveness cannot be doubted. They come in all colors, as well as white and black, and resemble expensive silk gimp laces very closely. Before investing in wood-silk lace one should consider its disadvantages. Once wet, it shrivels, rots and rapidly becomes a heap of strings and dust. Moreover, under the best of care, it is extremely apt to fray.

Very pretty and delicate are the necklaces of so-called white coral shown in jeweler's windows. The beads are not exactly white, but are of the palest possible pink—almost cream color, touched with flecks of deeper pink.

Another model was in black fancy chevot with a satin, smooth finish. The coat of this suit was not quite as long as the one just described, and it was, while perfectly fitted, only half light. All the seams were heavily strapped, and the front was double breasted. Two small pockets in the front added a "manish" touch. The skirt was simple in its outline, very stylish. It had panels stitched to the knees, and escaped the ground, as all walking suits now do.

Most women will feel incompletely equipped without at least one coat and skirt suit, but after providing this one in chevot, serge or tweed, the well-dressed woman will select costume, models, skirt and waist will have completely disappeared after summer gowns are laid away at the close of this month. Of course, home gowns with proper silk waists will be allowed, but no one will think of putting any amount of money into elaborate silk and chiffon blouses, as of old. These were never really good style from the artistic standpoint, but their convenience kept them in vogue for a remarkably long period, longer, in fact, than any known fashion with so little beauty to recommend it.

The prettiest simple gowns for autumn wear will be modifications of the short-skirted gowns of the past. Plenty of soft and pliable materials suggest themselves for these dresses. There are several weights of canvas goods which are admirably adapted for this purpose. A brown velvet gown of this description has a nine-gored skirt laid in deep pleats, the skirt, waist and sleeves following the same general plan. They are, of course, unlaced, over silk drop skirts of the same color. All have high stock collars, over which are placed emerald green turn-over collars.

A rain let it be a dressy gown of this description in thin black lace, trimmed with bands of coarse black lace. It is mounted over a slip of black and white shepherd's plaid taffeta. This shows through the material wherever the silk and voile touch, and is plainly seen under the lace bandings.

A handsome gown of thin veiling in the shade of blue known as hydrangea, is according to plaited, as finely as the machine allows. The long skirt is mounted on a tight hip yoke overlaid with bands of coarse yellow lace. The blouse has a round yoke and collar of fagoted bands, and this is edged with a band of the lace three inches wide. A second band of the lace crosses the blouse about in the middle, and there are lace cuffs and a bit of lace insertion on the sleeves. The skirt is given weight and finish by three thick waltz runs were run after the material was plaited.

The shops are still showing attractive bargains in summer waists and gowns and the discerning buyer will not fail to make a few judicious purchases for next season. Let the buying be judicious, for, while it is not likely that linen shirt waists and shirt-waist suits will differ materially in cut and decoration next summer, there is always a slight variation such as one does not care to have appear on any except the most informal garments. Again, although linen is supposed to be among the most durable of materials, many of the waists sold this season have not been at all well made. There must have been something radically wrong with the bleaching process of a great deal of the linen on the market this year. Garments do not improve by being laid away, and this fact ought to be counted. Pongee waists are good investments, and at one shop a great pile of well-cut waists were offered this week for \$3. They may be worn all winter.

Never was there such a charming display of rain garments as at the present time. Every one remembers the hideous waterproof, and the stiff, gossamer, so mislabeled, for it was neither light nor cool. The new cravenettes and silk-faced rubber garments are not only things of beauty, but they are practical protectors from rain. In color, the newest models appear in cashmere, grays, and in various shades of green. One may wear blue, black or brown cravenette garments as well. The silk-faced rubber coats are in lovely shades of red, champagne, pastel gray and white, and are dainty enough to serve as evening wraps.

In cut, the newest models incline to the modified raglan shape. A deep-pointed yoke sometimes shows an upper-arm gored, which is attached with rows of outside stitching to the sleeve, the fullness thereof being furnished by the under-arm gore. Other models are simply finished at the neck with narrow turned-down collars and small revers, with large, baggy sleeves and a stitched belt.—New York Evening Post.

The World Beautiful.

Lillian Whiting, in Boston Budget.

"God has promised to satisfy, but He did not promise when God has time enough and so have you, God has boundless resources and His resources are yours. Can you not trust Him? Trust and wait. He knows what is best for you. He has reasons for denying you now, but with the end He will satisfy. Life is what we are alive to. It is not length, but breadth. To be alive only to pleasure, pride, money-making, and not to goodness and kindness, purity and love, poetry, music, flowers, stars, God and eternal hopes, is to be all but dead."

There is no more practical and exalting ideal, as a working model for daily life, than that given in the counsel: "We must live as the Saviour did. Jesus divided his sorrows with his Father; his life, with the world. The business of life is the moving Godwards,—happy, or unhappy. Yet happiness is more likely to come to those who are so moving. . . . Perhaps the richest of God's gifts is an accepted sorrow."

Trust God now in the dark when it seems something. . . . One comes into the full sunlight of renewed energies in realizing that he is not merely to passively bear, but to do God's will; to enter into it with intelligent and cheerful co-operation; to identify himself with it and thus make in his own will. When Jesus said "I and my Father are one," He suggested the ideal of the relation that should exist between every human being and God. To be one with Him; one in the absolute acceptance and participation in His will to discover the leading and be swift to follow—in this state lies the true and the only real and abiding happiness of life.

It may be initiated by a great sorrow; but if it is accepted as a rich gift,—with its lessons of patience, sympathy and the larger comprehension of the significance of life, it is transformed, ultimately, into a serene and exalted happiness which is found alone in the divine currents.

A remarkable scientific experiment is now being projected which is not without its corresponding suggestion on the spiritual side of life. It is believed by many scientists that above the clouds, far in the upper air, is an infinite current, an unlimited zone of electricity. If this be true, it is then held that a magnet, entering this infinite atmosphere of electricity, would be

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The Horse.

Horse Dealers' Tricks.

"There are tricks in every trade, but I think that men who deal in horseflesh have a few more than those engaged in other occupations," said Samuel Ford, in the Milwaukee Sentinel. "One of the directions in which the grafter in this line turns his attention is to making horses appear younger than they are, and there are scores of methods for accomplishing this purpose. The usual way of telling the age of an equine is to examine its teeth. A horse has a full set when five years old, and this consists of forty teeth. Six months later the nippers, or front teeth, become marked by a natural cavity, and it is the presence or absence of these markings that demonstrates the exact age of the horse. As it gets older the cavities begin to wear away, and it is then that the fakir gets busy. In order to reproduce the markings on the surface of the teeth he cuts with a steel tool, and the requisite black lining of the groove burned in with nitrate of silver. In this way the animals that have passed their tenth birthday are palmed off as five-year-olds. If so desired, a three-year-old may be made two years older by chiselling away the side milk teeth, which are naturally present until the fifth year.

"It is not in that line alone, however, that the fakir operates," continued Mr. Ford, "for there are other things which call the attention of a close observer to the advanced age of a horse. One of these is a hollow which invariably appears on the forehead directly over the eyes. If a sale is in prospect, the cunning agent introduces a fine-pointed blowpipe through the skin and blows gently through this until the skin is perfectly level. Skill is also required to conceal the fact that a horse is broken-winded, for drugs and chemicals of various kinds are used in doing this. Another graft is to conceal the fact that a horse is lame. This is often done by inserting something in the shoe so as to make the other kind, or fore, foot, as the case may be, lame also, and while this gives the horse a peculiar gait, it makes the feet work alike. These are, of course, only a few of the more common forms of trickery with which horse dealers have to contend."

George A. Fuller, a noted driver, is seriously ill at his home in Tennessee at the age of seventy-five. He was for some years in charge of a school in Russia for educating trainers, and returned to America a year ago. He has been named the recipient of having a race horse named after him.

E. E. Smathers has bought the trotter Swift (2.12) from John F. Cookerill. Swift won a matinee race recently, trotting the two heats in 2.04 and 2.03, beating Smathers' Ida Highwood (2.02), that lately won a matinee race in 2.03.

With fourteen starters, the Saratoga Special furnished exciting sport for a crowd of nearly ten thousand persons. Aristocracy, John E. Madden's champion colt, won the rich stake of \$25,000 and the \$2500 cup for his owner, Hermis, E. R. Thomas' colt, won the first race, beating Major Dandergield by a length. There were three starters in the second race, the steepchase handicap, and Tankard had no difficulty in winning it. The fourth race was the Travers stakes of \$10,000 for three-year-olds, there being six entries. Ada May, J. B. Haggin's filly, took the money, giving Reliable, W. C. Whitney's colt, a fast race.

In raising a cow on cow's milk, great care must be exercised in order to keep the bowels right. The milk should be diluted with one-fourth its volume of water; it should be sweetened with sugar and always be fed at blood temperature. The foal should be fed at least six times in twenty-four hours during the first three months, and care must be taken not to overfeed; there is more danger of overfeeding than underfeeding at this time. As the foal grows older, less water should be added to the milk. Oil meal made into a jelly by boiling and shorts prepared in the same way as gruel are excellent for a motherless foal.

For horses fagged out after a tiring journey, there is no safer or better tonic than a "white drink," made by stirring a pint of oatmeal in a pail of water of which the chill has been taken. Drinks of this kind are not only good for restoratives, but they also seem to act as restoratives.

Dexter, the black stallion, thirty-nine years old the coming December, owned by Marion Monson of Fort Fairfield, Me., is thought to be the oldest horse in New England. He was bred and raised by Mr. Monson, so there is no question whatever about his age, having been foaled in Houlton in December, 1864.

Lou Dillon is now only a half second behind Crescens. She trotted the Cleveland track on Friday last week in 2.02. Quarters: .304, 1.002, 1.312, 2.022. A wind down the stretch is all that prevented her from breaking all records.

Notes from Washington, D. C. Consul-General Guenther at Frankfurt, Germany, sends an interesting report to the State Department on the efforts and experiments which are being made to obtain an efficient cross between the horse and the zebra. Zebras are, it seems, peculiarly immune from many of the diseases which trouble horses and cattle. Crosses which have been made have developed the "zebra" which is said to be in many ways superior to the mule; it is much livelier, has extremely hard hoofs, and is stated to be fully as intelligent. The German government is manifesting much interest in this animal, and the zoological gardens at Berlin possess many fine specimens, the zebra stripes being well preserved. The full-grown zebra stands about fourteen hands with a sixty or sixty-five inch girth. General Guenther reports that the experiments thus far have been so successful that it is anticipated that the zebra will during the present century completely supersede the mule.

A Clever Rig

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AT THE SHADY SIDE OF THE PASTURE.

Herd of G. L. Kirk, Wayne Co., Pa. See descriptive article.

That Americans are going to Canada is evidenced by a report received from Consul Burk, Ontario.

Homestead entries, he quotes, made in the Canadian North for the year ended June 30, 1903, numbered 31,002, as compared with 14,289 for the year ended June 30, 1902—an increase of 16,713. The figures for the month of June, 1903, show 6644 entries, compared with 3349 for the corresponding month of last year, an increase of 3295.

Many of these entries are undoubtedly made by foreigners from across the water, but our own statistics show that a good many Americans are leaving the United States to take up Canadian claims. Secretary Wilson expresses the belief that the Government would be wise to offer those homesteaders who are leaving our country an opportunity to find new and desirable homes in the United States through the irrigation of some of our fertile, but arid Western valleys.

Over 6,000,000 farmers' bulletins were distributed by the Department of Agriculture last year. The demand for some of these bulletins was so great as to necessitate a number of reprints of the same.

"What were the most popular of the farmers' bulletins issued by the department?" I asked Mr. Joseph Arnold, assistant chief of the publication division.

"Probably the most sought after bulletin," he answered, "was 'Good Roads for Farmers' (No. 95), also bulletin No. 36, entitled 'Earth Roads.' There seems to be a general awakening all over the country on the good roads subject. Another bulletin in much demand is No. 51, 'Standard Varieties of Chickens.' This pamphlet could, I believe, be read with profit by every farmer not already a chicken fancier. The efficiency of the average barnyard fowl is far below what it should be, and yet it is such an extremely easy thing for any farmer to breed up his barnyard flock into probably fifty per cent. greater productiveness.

Over 125,000 of these bulletins were distributed. Another closely allied pamphlet (No. 141) is 'Poultry Raising on the Farm,' of which 130,000 were called for. This publication goes more into the care of chickens, discusses incubators, brooders, etc., and the diseases which young chicks fall heir to, along with their remedies. Bulletin 106, 'Breeds of Dairy Cattle,' has also proved a very popular one, 125,000 copies having been distributed during the year. This is another subject which interests almost every farmer throughout the country. Bulletin 55, 'Dairy Herds,' also was requested to the extent of ten thousand copies. This bulletin, written by Major Alvord of the dairy division, has some extremely valuable suggestions for farmers who are in the milk and dairy business or contemplate embarking therein. The 'Fruit and Garden' (No. 154) is a valuable little bulletin of which we distributed 80,000, notwithstanding it was published well along in the year. The 'Vegetable Garden' is an old publication of the department which has been reprinted many times, but the demand for it continues, and sixty-five thousand copies were sent out last year. The 'Apple and How to Grow It' (No. 113) was in demand to the extent of ninety-five thousand copies. 'Practical Suggestions for Farm Buildings' (No. 126) appeals to the farmer of all sections, and we printed and distributed an even one hundred thousand of this. It is a forty-eight page pamphlet, containing a large number of drawings and cuts, which enable the farmer who is not a carpenter or mechanic to himself make a good many needed improvements, utilizing his own or his hands' spare time, and at the cost of only the raw materials of lumber and nails and possibly paint. Bulletin No. 170, 'Principles of Horse Feeding,' although but recently issued, has been in great demand, as every farmer is presumed to have at least one horse which needs feeding.

"I would like to say a word right here, however," said Mr. Arnold, "about the distribution of these bulletins. The department's supply is very limited, whereas every member of Congress and the Senate has his quota of the same and we would appreciate it if farmers would apply to their own congressmen. The appropriation for publishing then comes from Congress and it is but right that congressmen should know of the demand, as well as have the opportunity of supplying it. Of course, in case their supply becomes exhausted, a direct application to the Secretary of Agriculture will always find us very glad to furnish the farmer with the desired publication if we have it, or if not, as soon as a supply is printed. The division of publication has a printed list containing the titles of about 175 farmers' bulletins, covering almost every feature of farm work and growth, and we will be glad to furnish this list upon application. The bulletins are usually short—covering from twelve to forty pages—condensed articles which even the extremely busy man can usually find time to glance over and pick from useful points."

Exports of breadstuffs for July were small, being only \$11,000,000, against \$13,000,000 for June. The figures for the first seven months of the year, however, were \$113,000,000, respectively, against \$1,900,000 and \$1,700,000 for June and July of 1902.

Exports of hogs and cattle have been heavy thus far this year, as compared with the figures for last year. The June and July figures for 1903 were \$3,000,000 and \$3,500,000, respectively, against \$1,900,000 and \$1,700,000 for June and July of 1902.

The cotton crop is bringing money into the South this year all right. The Treasury report figures for the first seven months of the year are \$154,338,000, representing 3,146,000 bales. The year 1896 saw a larger exportation during the same period, namely,

3,666,210 bales, but the price received therefor was only \$109,890,000.

Exports of corn for July, 1903, were 5,155,000 bushels, against 480,000 bushels last July. Corn meal likewise shows a large increase, due, of course, to the extremely short corn crop of the year before. The corn meal export in July, 1903, amounted to ninety thousand barrels, against twenty-three thousand barrels for July, 1902.

GUY E. MITCHELL.

From Factory to Farm.

Thousands of men in every large city who have reached middle age—honest, sober, industrious men—are living in daily dread of the hour when, through no fault of their own, their advancing age will lead to the loss of their situation; and every time the superintendent or general manager glances toward them as he passes by, each feels that he is thinking: "It's about time I put a younger man in your place, old fellow."

To such men the advertisements of "Farms for Sale" have a peculiar interest, and they wonder if it would be possible for them to make a living for themselves and families on a farm. City born and bred—many of them—with no knowledge of the difficulties or delights of farm life, they yet look forward to it with mingled hope and fear as the only possible escape from the situation.

To such men G. A. C., Willington, Ct., offers in the New York Tribune the following history of a city man and family, who, without any knowledge of farm life, bought a farm in northern Connecticut nine years ago, and who, with little physical strength and handicapped by ignorance of farm work and lack of capital, has yet made a good living and constantly increased the value of the farm. At no time in these nine years has there been a desire on the part of any member of the family to leave the farm and go back to city life.

HIS OWN BOSS.

The freedom of it, the being your own boss, the getting out of the whirl and rush of the city, and the gratification of that instinct in the heart of man that leads him to an age of approaches to get back to Mother Earth from whose breast he came and to which he will soon return, are all experiences for which money cannot compensate. I had often read the phrase, "Communion with nature," and in a vague and indefinite way thought I knew what it meant; but the real delight and deep joy of it that came to the heart of a man when his life is so attuned to his surroundings that he almost unconsciously thanks God that he is alive, was an experience I had never had until I came to live in the country.

The panic of 1893, closing the factory in Brooklyn where for several years I had been employed as shipping and receiving clerk, decided us to look for a farm at once. It was useless to look for another situation, no one seemed to know when our factory would be opened again; meanwhile \$25 a month rent was eating a hole in our savings; so one day my wife and I started out to look at farms, and finally concluded that a farm of eighty acres in northern Connecticut which we could buy for less than \$1000 was the best for the money that we had seen, and we bought it, together with three cows, \$100 worth of hay and fifteen hens. Then we went back to the city to pack up and move. Now the full seriousness of the situation weighed constantly on my mind. I realized to the full that it was no light thing to break away from the work of a lifetime and start in to make a living at something of which we were totally ignorant.

A DIFFICULT START.

I had never handled a plow; none of us knew how to milk or to make butter, and it was upon this latter that our only source of income depended, for the man from whom we bought the farm was furnishing butter to a restaurant in a village six miles away, and we were depending on that market for our cash income.

It was the middle of September; the grass still green; the ground covered with big, nice apples, and there was an appearance of restfulness and peace about the little eight-roomed cottage situated in a corner of the apple orchard that gave no indication of the hard work and long hours we were afterward to put in on the farm. The farm is situated on the southern slope of a hill ending in a ravine through which flows our trout brook; to the south of the brook rises the still higher hill whereon is the village, with store, postoffice, churches, school, etc., one quarter of a mile away.

The family will never forget that first night on the farm. I had been detained in New York owing to the difficulty of getting my money in that panic time, and my wife and two granddaughters arrived to find that the furniture—shipped several days before—had not got there, and the farmer of whom we bought had just moved his last load out. As night approached they were without a light, table, chair or dish, with three cows to be milked, and they were worrying because I had not come on the afternoon train as arranged. But we had good neighbors. One came and milked the cows, and another sent word to have the family come and stay over night with her, and when I arrived in the morning with the word that the furniture was at the station all clouds passed away.

We hired a boy who knew how to milk, and after a while my oldest granddaughter and myself both learned how. She was sixteen, and although city bred, just delighted to take a hoe and follow me into the field. We hired the plowing done and then we planted a lot of potatoes; after they were up there came on a rainy spell, and when the ground got dry enough to hoe the weeds had completely covered the potatoes, so we had to pull the weeds until we could find a potato hill and then hoe around

it. But the hot sun soon made the weeds look sick, and we raised a good crop.

Before we had been in the country two weeks we found that a horse was an immediate necessity. Horse dealers had been trying to sell us old plugs, but I had decided to get a good horse, so one day I went to Willington and bought a three-year-old Gold-beater colt, with harness and two-seated top carriage, and started to drive fourteen miles late in the afternoon over unknown roads to the farm. While under the circumstances it was not wise to buy such a horse (an old plug used to farm work is what I would recommend), it so happened that I "struck oil" in buying Ben, for he has been not only useful but the pet and pride of the family ever since.

Our only cash income was from the butter made from the three cows, until the next berry season, when they helped a little, and I increased the berry patch until it brought us in \$2 to \$3 a day during berry time. We also increased the number of hens until we had fifty or more, and found them the most reliable source of income with the least labor of anything we had. After two years we sold two of the cows, for I came to dread that long, cold drive in winter of six miles to the north over roads sometimes impassable with snow, and began to develop the hen business seriously, as our main support. Each year since we have built more henhouses and raised more chicks, until now we keep more than three hundred over winter, and raise five to six hundred chicks each season. Five years ago we set out four hundred peach trees, and in the ten-years began to bear, and added materially to our resources.

CHEAP LIVING.

It is surprising to a city man who has been earning—and spending—\$25 a week to just support his family, to find out on how little money he can live in the country. If he raises his own milk, butter, eggs, pork, lard, hams, etc., and potatoes, berries, apples and all fruits for winter preserves, he does not have to buy much except flour, sugar, tea, coffee and meat, and he can raise a good part of the latter by keeping his calves until a year or two old.

HELPED BY THE HENS.

In 1896 we began to keep an account with our poultry, and found that our fifty hens had made us a cash profit of over \$100. The next year the profit was \$131, and in 1900, with 120 hens, our account showed a net profit of \$200.14. This was the largest profit per hen that we have ever made. They were a cross of white Wyandotte and white Leghorn, and were the best layers I ever saw. We shipped all our eggs to Worcester, Mass., and broilers and fowls to Hartford and Springfield. Nineteen hundred and one showed a profit of \$305.81, and last year we cleared \$327.44; this from 216 hens and pullets on hand Jan. 1, reduced to about 125 by sales of fowls during the summer, would make the average number kept through the year about 160.

The above figures show that the net profit from our fowls has been for several years about \$2 per hen. Whether this average can be kept up with larger numbers of fowls is doubtful, but my aim is to keep about five hundred hens and raise chicks enough to replace half of them every year. The profit from these will support a small family in the country in comfort, and the labor is not heavy or difficult. O. W. Mapes of Middletown, N. Y., keeps seven hundred hens, and claims that one man can care for two thousand. He is four miles from a railroad station. Of course, the nearer one is to express office and grain dealer, the less time has to be spent on the road.

FARM BARGAINS.

Plenty of farms can be bought for \$600 and upward, on which an industrious man can make a living for himself and family; farms where the buildings are worth twice the amount asked for the whole farm. Why are they so cheap? Because, in many cases, the children went to the city and have been more or less successful; the old folks have died, and the young people will take almost any price to get rid of what they have no use for. Thus is the door of hope left open for the city worker who feels that his advancing age will soon compel him to seek other means of making a living; and freedom, health and happiness may still be within his power.

Science and Old Age.

From twenty to fifty a man should live for himself and his family, from fifty to one hundred for science and humanity and after a hundred for the State. Honored, useful, in full possession of all his faculties and sixscore years and ten, the graybeard of the approaching future will be among the most enviable of mankind, for the fear of death is an aberration. The fact is that only one man in a million at present dies a natural death. We should live till 140 years of age. A man who expires at seventy or eighty is the victim of accident, cut off in the flower of his days, and he unconsciously resents being deprived of the fifty years or so which nature owes him. Leave him a little longer, and in due time he will desire to die as a child at dusk desires to sleep. The sandman will pass!

All our instincts drop from us one by one. The child cries for mother's milk. The idea of such an ailment is repugnant to the adult. The desires for sweets, for play, for love and love-making, for long walks and adventures are all impulses that have their day and pass, and the wish to live is an instinct which falls also with satiety. Only at present none of us live long enough to be satiate with days.—Professor Metchnikoff's 'Studies in Human Nature.'

LAKE GEORGE.

Low Rates from Boston, Worcester and Springfield, Sept. 4 to 7, 1903, via Boston & Maine R. R.

Lake George, even the name sounds pleasant and beautiful. Does it not recall scenes of history never to be forgotten? A troop of Green Mountain boys under Ethan Allen capturing the fort at the head of the lake, and the famous battle of Lake George at the foot of the lake.

How often since have the vacationists from all parts of the country journeyed in the summer time to this beautiful spot to enjoy the beauty which nature has so lavishly bestowed here, and to become acquainted with a spot so full of historic romance.

Indeed when the Saratoga gets a trifle tired of his gay life, he takes a run to Lake George. You can enjoy the sail up the lake to Fort Ticonderoga or even take the steamer trip over the great Champlain to Plattsburgh.

However, it is just as one prefers, if you desire you will find enough to interest you at the delightful Lake George.

The unveiling of the monument in commemoration of the battle takes place Sept. 7, and the President and the governors of six States are expected. Regular army soldiers will be present and will manoeuvre, as will also the State Militia from several States.

Round-trip tickets to Lake George will be on sale at the Boston & Maine Railroad at the following low rates and stations: Boston, \$5.00; Worcester, \$4.00; Springfield, \$4.15. Tickets will be good going Sept. 4-7, inclusive; returning Sept. 4-9, inclusive.

A DELIGHTFUL TRIP FOR \$2.00.

A beautiful ride through New Hampshire and a sail on the Lake Saturday, Sept. 5.

The Lake Winnepesaukee Excursion from Boston takes place Saturday, Sept. 5, via the Boston & Maine Railroad. The sail around the lake occupies five hours, and the view from the decks of the steamer is grand. The White Mountains can be seen in the distance, on a clear day the peaks of Mt. Washington can be seen quite plainly.

The round-trip rate is only \$2.00. Special train will leave Boston at 8:30 A. M. Tickets will be on sale at City Ticket Office, 322 Washington St., up to 5 P. M. Sept. 4, and at Union Station Ticket Office until departure of train.

\$2.00 TO CENTRE HARBOR, LAKE WINNEPESAUKEE, SATURDAY, SEPTEMBER 5.

Sixty Miles Sail Over the Lake. September 5 the annual excursion to Lake Winnepesaukee from Boston will take place. The round trip rate is \$2.00. This includes the sail of sixty miles around the lake. You can secure a good dinner on board the steamer.

Special train via the Boston & Maine Railroad will leave Boston at 8:30 A. M. Tickets will be on sale at City Ticket Office, 322 Washington Street, until 5 P. M., Sept. 4, and at Union Station Ticket Office until departure of train.

Asbury Grove Camp Meeting at Hamilton and Wenham Aug. 29 to Sept. 7. Reduced Rates.

On account of the Asbury Grove Camp Meeting at Hamilton and Wenham, Mass., the Boston & Maine Railroad will sell round-trip tickets at reduced rates from this station and many principal stations on the Eastern and Western Division to Hamilton and Wenham. For information in regard to rates and stations, see Boston & Maine posters or inquire of agents.

No Place Like It.

There are seashore resorts everywhere, but few sections can compare with the famous New Jersey coast, and there is nothing more beautiful. The bathing is the finest, the climate delightful and the surroundings enchanting. There are fine roads in every direction, and the traveler is in the midst of a region in every way to his liking. Likewise the interior of Jersey is interesting from every standpoint. The General Passenger Department of the New Jersey Central has just issued a profusely illustrated book on New Jersey entitled "Seashore and Mountains," which is sent to any address on receipt of six cents in stamps by C. M. Burt, General Passenger Agent, New Jersey Central, 143 Liberty Street, New York.

BEAVER VALLEY HEREFORDS.

WIBAUX, MONT.

E. H. BREWSTER, Prop.

Farm 11-2 miles north of town.

Registered Herefords of both sexes and all ages for sale at all times at bottom prices.

I HAVE A VERY CHOICE LOT OF HEAVY

Percheron Stallions

As good as can be found in any barn in America. They are pure bred and have all the good qualities that the American trade is looking for. With my long years experience in the importing business I am able to find and buy the best that there are in France. Come and examine the stock and you will be pleased with them and the very low price that I am offering the best of stock for. 30 miles from Chicago. 4 daily trains each way on C. M. & St. P. R. R.

H. A. BRIGGS, Elkhorn, Wis.

SHORT-HORNS FOR SALE

AT PRIVATE TREATY.

On account of advanced age I will sell my entire herd of Short-horns, numbering about 100 head, nearly all females, of Bates, Flat Creek Young Mary, Rosemary and other tribes, many of them with calves at foot, and in good condition. Have three herd sires of Scotch breeding and a number of other young bulls. I MEAN BUSINESS, and will be able to suit purchaser at low prices.

ABRAHAM MANN, ROSSVILLE, ILL.

106 miles south from Chicago on C. & E. I. Ry.

ROBBINS SHORT-HORNS

WE BREED OUR SHOW CATTLE AND SHOW OUR BREEDING CATTLE

WE BRED

All the females in the first prize aged herd at the International of 1902.

All the females in the first prize young herd at the International of 1902.

All the first prize calf herd at the International of 1902.

All the females in the first prize aged herd at the American Royal of 1902.

All the females in the first prize young herd at the American Royal of 1902.

We showed no calf herd at the American Royal but bred the sire of the first prize herd.

All these females except three were sired by our present stock bull THE LAD FOR ME. Of the remaining three one was granddaughter of his, one a half-sister and the third was a granddaughter of GAY MON-ARCH. Write us for what you want.

J. G. ROBBINS & SONS, Horace, Ind.

WOODLAND HEREFORDS

The home of the King and Queen of the breed, DALE and BETTY 2d. Sires in service are the \$10,000 DALE, champion bull of America; BEAU DONALD 3d and PERFECTION 2d.

This herd comprises such cows as BETTY 2d, champion cow 1901; CARNATION, the best-prized single female sold at public auction; LADY HELP, champion yearling at the English Royal, 1899; MILLY MAY, winner of special prize for cow and her produce at National Hereford Show, 1899; two choice sisters of Dale, COLUMBIA and COLUMBIA 2d, and numerous others of like quality. Show stock a specialty. Bulls and females for sale at all times. Visitors welcome.

J. C. ADAMS, Moweaqua, Ill.

FRED CORKINS, Herdsman.

KEISER BROS., KEOTA, IA., KEISER BROS. & PHILLIPS, RED KEY, IND., IMPORTERS AND BREEDERS OF

Percherons, Shires and French

Coach Stallions.

Never were better prepared and disposed to furnish you such excellent horses at such conservative figures as at the present time.

The Measure
of Success in Wheat Growing is a complete fertilizer containing 6% actual Potash. A deficiency of Potash in fertilizers will result in small grains. Our books on Wheat and Grain Culture are free to farmers. GERMAN KALI WORKS, 93 Nassau Street, New York.

SCOTCH COWS AND HEIFERS

of good quality, in calf and of great Scotch sires of the period, and a few

HIGH-CLASS BULLS

for sale at prices you can stand.

Shropshire Rams and Ewes of greatest individual merit and breeding for sale as usual.

ASK FOR CATALOGUE.

Representative in America of ALFRED MANSELL & CO., College Hill, Saratoga, England.

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Imported and Home-Bred

SCOTCH SHORT-HORNS

OF BOTH SEXES.

WM. HOLLAND, LIVE STOCK AUCTIONEER.

Will sell anywhere in United States. Posted on all breeds of stock. Terms reasonable. Address.

Waterloo, Ia.

The Riby Herd and Flock

SHORT-HORN CATTLE

AND LINCOLN LONGWOOL SHEEP.

HENRY DUDDING, Riby Grove, Great Grimby, England.

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